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ABSTRACT

This document addresses vocational training in European countries. The document contains the following articles: (1) "Dear Readers" (Ernst Piehl and Georges Dupont); (2) "Interview with Lord Plumb, President of the European Parliament" (Georges Dupont); "The European Community's 'Ostpolitik'" (Horst G. Krenzler); "Opening up to the East in the Field of Training" (Jan Rombouts); "Introduction" (Peter Grootings and Ernst Piehl); "Technical Vocational Training in the USSR" (W. W. Shapkin); "Social Expectations and Trends in the Development of Vocational Education in Poland" (Stanislav Kaczor); "Vocational Training in the German Democratic Republic" (Wolfgang Rudolph); "Vocational Education in Czechoslovakia" (Vaclav Rohlicek and Ivan Svanda); "New Technologies, Qualifications, and Vocational Training in Hungary" (Annamaria Hethy and Lajos Hethy); and "Vocational Training in Bulgaria" (Michael Stefanov). The document includes a section on information sources that contains an annotated list of about 50 publications and the names and addresses of relevant institutions and other organizations arranged by country. (CML)

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Our European neighbours

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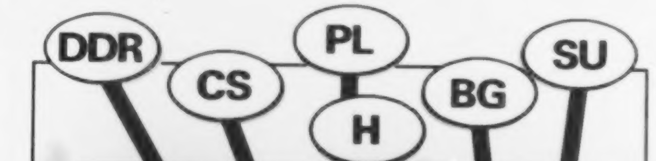

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Dear Readers,

At the ceremony in commemoration of the 100th anniversary of the birth of Jean Monnet held at CEDEFOP at the end of last year, the President of the European Commission, Mr Jaques Delors, said the following: 'The Commission, the Council of Ministers and the European Parliament need institutions to reflect on their behalf, promote the exchange of opinion on thoughts concerning Europe and prepare actions which must be implemented at Community level'. In this spirit, the 'European Centre for the Development of Vocational Training' is also in the vanguard of the process of intensifying relations with the countries of Eastern Europe. In this field, hitherto largely *terra incognita*, the Berlin EC Centre endeavours to fulfil its statutory tasks as a coordinating body for research activities, an interface for information and publications and a platform for encounter, exchanges of experience and ideas. Against this background, the management board of CEDEFOP decided to devote this special issue of our magazine to relations between the EC and the CMEA (Council for Mutual Economic Assistance) (see also the interview with Lord Plumb, President of the European Parliament).

The signing of the 'Joint EC/CMEA Declaration' on 25 June 1988 in Luxembourg marks a turning point in post-war history. This declaration, including, among others, confirmation under international law of the full integration of Berlin (West) into the EC, paved the way for a normalization of relations between the EC and its Member States and the CMEA and its East European member States. With the exception of Romania, all the East European CMEA States have meanwhile not only established diplomatic relations with the EC, but have also entered into negotiations on an intensification of relations in all fields of mutual interest (see the article by the competent Director-General of the European Commission, Dr Krenzler). Such fields include education and vocational training policy, in particular in the context of the accelerated introduction of new technologies and the process of change in work organization and qualification structures. This provides the background for this special issue.

The normalization of relations between the EC and the CMEA States however also implies an increasing demand for information about our neighbouring countries in Eastern Europe. The time has therefore come for CEDEFOP to make its contribution in the form of an exchange of information and experience. Vocational training experts in Eastern Europe have in fact been attentively following CEDEFOP's work for years. The numerous visits to CEDEFOP and the growing demand for information on individual aspects of CEDEFOP's activities are a significant testimony of this fact.

The following specific work activities have so far been implemented or planned:

- the elaboration, translation and dissemination of monographs on the education and vocational training systems of the six CMEA States; the summary versions of these monographs are printed in the nine EC languages in this issue. Further translations and updates shall probably follow. This basic information is to serve as a support for a host of bi- and multilateral contacts ranging far beyond CEDEFOP's restricted financial and personnel capacities.

- the preparation, co-organization and evaluation of a working conference in Budapest on 18/19 January 1990 on the main subject of 'Quality and education/training', to focus on cross-border exchange of experience and ideas, in particular the problem areas of trainers and managers (see the article by Mr Rombouts, Secretary-General of the 'Institut européen pour la formation professionnelle,' Paris).

- conceptual preparation and support of the third European Continuing Training Congress, to be implemented by the regional government of Berlin (the Berlin Senate) in conjunction with other institutions, on the subject 'The demands and realities of continuing training in the EC and European CMEA States'.

Alle these steps are to be taken on hitherto unknown territory. Barriers — e.g. different languages, systems, economies and technologies — shall have to be overcome. The process shall require circumspection, patience and a sense of commitment. Let me finally quote the words of Mr Krenzler, Director-General of the European Commission, in his speech in Berlin on 21 October 1988:

'The objectives of the European Community extend far beyond the economic field. The interior design of the EC part of the European house includes not only the free movement of goods, services and capital, but also the movement of persons and ideas. The normalization of relations and the departure of the USSR and East European states from a policy of self-isolation must pave the way for more exchange and more cooperation ... Such a process will make our continent a safer one — in the interests of the people in both West and East.'

Ernst Piehl and
Georges Dupont

Interview with Lord Plumb, President of the European Parliament

Perestroika has given rise to a good deal of curiosity and hope. More and more, the media are showing what is happening with our neighbours in the East. And it is astonishing to find that the economy, social and cultural affairs are being discussed more openly than in the past. As a result, we are realizing more and more that the Europe of the Twelve only accounts for half of the Europe we find in our history books.

The developments have also led to some movement in the world of politics, particularly within the European Community. Mr President, you have visited eastern countries in the past. What impressions did you gain, particularly as regards recent developments?

Many of these countries I had not been to before, so that whilst a first impression is always interesting, you cannot make a comparison. However my impression certainly is, that all countries are beginning to open up. *Perestroika* is something that I think many people find interesting, although I am not sure that many of them fully understand what it means. There is perhaps anticipation that things are going to happen quickly but everybody knows they cannot happen quickly. And I think the way that things are moving towards more private enterprise for example, is making them realize that they now have an incentive which they never believed they would have, that is to produce more for themselves. I therefore think that whilst each of the countries in the Eastern Bloc wants to work directly as a country with the Community, there is a recognition that perhaps in the CMEA countries they can work from strength as they see the strength of the European Community growing, both in economic and in political terms.

Lord Plumb (left), President of the European Parliament, interviewed by Georges Dupont, CEDEFOP.

So I am encouraged by what is happening. I believe that the recognition of the European Community by the CMEA which took place with the signing of the agreement in Luxembourg in June last year was a more significant move than many people realize. In fact I was amazed that it did not have more publicity, because I think it was just as important, if not a more important decision than those taken by Gorbachev and Reagan at the summit they held.

This agreement of 25 June 1988, do you consider it to be so important that it could change the face of Europe?

Yes, it is certainly my view that the face of Europe could be changed and I would like to think that the face of the Eastern Bloc will also be changed. I was very impressed for instance in a country like Hungary, where they regard themselves more as central European than they do as members of the CMEA countries. On the other hand I think the influence that Europe can have, in every direction, can change the face there, and certainly change attitudes in Europe towards many of those countries. Countries that have been almost severed from direct relations with European countries in the past. I remember the occasion when I had a very high powered group of Russians to see me in the early part of last year, long before the agreement was signed. They invited me to visit Moscow for talks with them at an official level, on matters of political and economic concern to us, and I said I refuse to come to Moscow until such time as there is official recognition. I thought I had offended them, but in fact if I did play a small part in bringing about that recognition, it was by saying that recognition has to come before we can talk as Europeans to representatives of the CMEA countries.

These countries have, after all, a European culture and, despite the fact that they have had a special regime over the last 40 years, do you not feel, when visiting these countries, that you are in Europe?

Yes, it is not the sort of Europe that I have grown accustomed to. It certainly does not have the freedom and it certainly does not have the democracy that we tend to take for granted in the countries of the European Community for instance, and nevertheless they see themselves as a part of Europe. And certainly, taking Hungary as an example, they really are central Europeans and proud of it. But they see a direct possibility of their being more closely associated with the European Community through Austria, and that I think is a very interesting development that we shall see taking place in the not-too-distant future.

Mr President, the European Parliament has taken a lot of initiatives, and whenever President Delors of the Commission gives an official address, he makes mention of the eastern countries. What possibilities do you see for bringing the interests of east and western Europe together?

Firstly, I support Jacques Delors on all of the statements he makes as far as the Eastern Bloc is concerned, because I regard that the decision of the CMEA to recognize the European Community to be one of the three most important things that have happened during my presidency. But I think there has to be at cultural level a lot of discussion, a lot of talking, a lot of exchange of ideas and I think this can be done in different ways. For instance, I am encouraged to think that there will be more joint ventures in terms of commercial operation between European companies and Russian companies, as some of those companies in themselves are able to operate on their own without necessarily having State control. I should think we shall see a lot of that. Now once that happens, it will bring people together, and therefore I think there will be a better understanding between us. I speak of Russia, but of course that applies to many other countries too.

I would like to think also that because we feel so strongly on the question of human rights, there would be a lot of improvement in the not-too-distant future in countries like Romania, where there are major problems. And there is no doubt there are a lot of people, who are suffering far more than we know. In that sense, therefore, we can bring an influence to bear on those people and on those countries. In fact, it is interesting in debates we have held recently in the European Parliament, that there were many who were saying 'well let us cut off trade with those countries and force them to put their house in order', to be freer, to respect the rights of humans in the way that we believe should be the case, as we do in all European Community countries. So I think all those things combined are going to perhaps precede the cultural ties which we obviously must talk about and I think, if I may say so, through the work that you are doing in vocational training, here is the place where you can bring people together, young people and people of middle-age or older, who may suddenly realize that there is an opening, there is an opportunity and there is certainly a real incentive for bringing the different interests, the different cultures together.

This social dimension of the common market is of great current interest. Many discussions are directed towards 1992 and, a step further, to the year 2000. In society, vocational training is an important factor and there are many firms which are doing trade with eastern European countries who would like to learn more about the skill situation there. Do you see the Centre playing a role in the encouragement or facilitation of contacts between enterprises here and enterprises and people there?

A general overview of the hemicycle of the European Parliament in Strasbourg

I think vocational training is the most important ingredient of a social dimension. I believe that the whole of the funding from the EC in the social area is badly named. Too often, I think, people think of a welfare State. They think the Community is going to put money into a fund which is going to keep people idle. That is not the intention. I think we ought to call the fund 'vocational training', because that basically is what it is about. It is not just a question of training young people, it is the creation of employment. The future may show that the growth industry is going to be the leisure industry, and training in the leisure industry might be just as important, just as functional as a training to be a high technician. And so all these skills are needed, and I would certainly wish to see a maximum amount of the funds going for training, the recreation of jobs, the movement of people so that they in fact can find employment wherever they want to find employment, not necessarily in their own country, in their own region but elsewhere, even for a short term, because we learn from each other's experience in these areas. So I am very anxious and indeed I shall be pressing very hard for the maximum use of those funds in the particular area of vocational training, as well as making sure that we have a much improved situation in our schools and universities, where if we qualify for a degree in one university, that degree enables one to go on for further vocational training or indeed, to go into another country and apply the benefits of that degree wherever they can be applied in the Community, and not have this nonsense of going through five years of training in the university, only to find that you can only apply the benefits of that training in certain regions.

Applying your last remarks to the relationship of the Community with the eastern countries, is vocational training not one of the first subjects on which the dialogue should centre?

I think exactly that. The best way of getting people together, understanding each other's problems, is to get them together in a teaching house, or get together at a workplace, or to get together on a football field, where, of course, they are com-

Strasbourg
On the left, the Palais de l'Europe in Strasbourg where the European Parliament sits; on the right, on the bank of the Ill, the offices of the parliamentarians. In the background, the city centre with its cathedral.

peting with each other but at the same time learning to understand the behaviour of other people. If I give a simple illustration of that; invariably in the United Kingdom, someone gets up in a meeting who will say 'Well yes, we accept what you are saying about the growth of this common market, we believe you are absolutely right in saying we have to make a common market out of the uncommon market we have had in recent years, but you will never be able to do that, because of the devious French, or the dogmatic German or the temperamental Spanish and Italian, and so on.' And I always answer 'Well of course you are right, you know you are right, because you are British. But does it ever occur to you that the person in the other country — and I am often asked this same question by a Frenchman, a German, an Italian, a Dane, or a Dutchman — says that because of the stupid British we will never make any progress'. In other words, one should bring them together, as people do, for example through vocational training, and finding the right vehicle through which they are going to understand each other's problems so that is the centre, that is the house where in fact the people can come together, East and West, and that is my form of *perestroika*.

So you think ideally we should all be looking at the year 2000?

I think that we have to think in terms of 2000 and I think anyone who thinks that 1993, at midnight at the end of 1992 the world is going to change, is really living in cloud cuckoo land. Things are, in fact, changing now. There is nothing new in this; but there has to be recognition that we really mean business, that we really are going to create this freer situation where we are going to see the removal of border-controls. You know, people are still saying that the checkpoints for passports must remain, because there needs to be a checkpoint. But really in these sophisticated days they are nonsense, because you do not often find a terrorist stopped at passport controls. And I think there are more sophisticated ways of checking the movement of drugs, the movement of terrorists and so on. But all these things are going to take time, and in all reality I think we shall find that we are moving towards the end of this century and to the year 2000 before, in fact, all the citizens of Europe fully understand what has happened to them.

As you know, our Centre is located in Berlin. Given the particular situation of Berlin, do you think we have a role to play as a meeting point between the two systems?

I think you have an enormous role to play, because if you can bring people over from the eastern side of Berlin, or vice versa, get people going more freely through onto the other side, then this is going to bring about a situation which, very gradually and it has to be very gradually obviously, there will be an understanding that the world is perhaps moving to become a freer place than having the situation where there is a massive wall between people, people who are of a similar culture or background and that day, of course, would certainly be a day of rejoicing in the interest of peace and freedom, which basically is what the European Community is all about. We now, I believe, are proving to the rest of the world, that rising out of the ashes of centuries of war, we now have a Community, and a European Parliament representing 320 million people. This is unique in history, something that is unique in the world, because no other countries have tried in the same way to bring peoples together, representatives of peoples together, as we have in the European Parliament, and I think the one thing that has impressed me most of the last two years, is that moving around the world, I certainly realize that we are becoming the envy of the world in the way that we are coming together. The citizens of Europe should realize that. But as a centre for vocational training you can do as much as anyone can do, if not more, in my opinion, in bringing East and West together.

We have planned a number of activities concerning the relationship between the European Community and the CMEA countries, and next year a vocational training congress will be organized by the Senate of Berlin involving the Community and CMEA. I very much hope that you yourself will be there as an encouragement to us in our work.

Well that is a very kind invitation. And since it is obvious that I feel quite strongly on these matters, and I am encouraged by the work that you are doing and other centres are doing in this direction, I certainly would wish to give it all the encouragement I can, and if it is all possible, I will be very happy to accept the invitation.

Thank you Mr President.

Interview by Georges Dupont
on 17 March 1989

The European Community's *Ostpolitik*

Revised text of a speech held on 3 March 1989

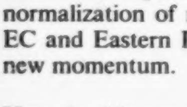
Europe has once again become a fascinating scenario in history. Today two highly dynamic and interactive processes can be observed:

- firstly, the new level of integration within the European Community (the 'single market of 1992').
- a continuous intensification of pragmatic cooperation in Western Europe, in particular between the EC and EFTA (from the European free trade zone to the 'European economic area'). New forms of institutional cooperation between the EC and EFTA can be conceived.

Secondly, the beginning of economic and political reform in the USSR and other Eastern European states and the final normalization of relations between the EC and Eastern Europe have gained a new momentum.

How is this process of reform to be assessed?

- Western observers all agree that this process represents a serious attempt to achieve a fundamental reform of the system. Without going into the motives, it should nevertheless be mentioned that success as a military power has contributed to failure as an economic power.
- Whether or not Gorbachev's attempts at reform shall meet with success still remains to be seen. The process would appear to be irreversible.
- It is in the interests of the West that this process is a success.



Dr Horst G. Krenzler

Director-General for External Relations, Commission of the European Communities, Brussels.

It was on this premise that the European Council at its meeting in Hanover (27/29 June 1988), welcomed and encouraged the greater degree of openness which now characterizes the economic system of the Eastern bloc and the accompanying reform of its social system. The individual Member States of the EC and the Community have expressed their interest in a reinforcement and expansion of political, economic and cultural relations with the Eastern bloc which is also in the interest of *perestroika* and *glasnost* in Eastern Europe.

Together with the use of the European Community's trade policy instruments, cooperation among the Twelve in the field of foreign policy (EPC) towards the Soviet Union and other Eastern European countries is also of major importance. A first practical step in this direction was taken on 8 February when Soviet Foreign Minister Shevardnadze hosted a dinner for the twelve EC Ambassadors in Moscow for the purposes of a political dialogue on various foreign policy issues. This dialogue is to be pursued, probably in the coming spring, at the level of the EC 'Political Directors' (Troika). An informal, *ad hoc* meeting between the Foreign Ministers of the Twelve and the Soviet Foreign Minister may also take place behind the scenes of the United Nations General Assembly in New York this September.

However the political dialogue between the EC/EPC and the Soviet Union is clearly still in its teething stages and cannot be compared to the intensity of our dialogue with the USA.

In the economic field, the USSR and the Eastern European countries are seeking ways and means of improving their economic situation. An intensification of trade could make a contribution in this context. However this will only be possible if the proportion of finished products exported is increased to surpass that of energy products and raw materials which still constitute the lion's share of Eastern exports to the West. Whether or not this target can be reached will in the final analysis depend on a substantial improvement in the quality of the Eastern bloc's range of exports which would be achieved by access to Western know-how in the field of technology, production methods and marketing. The present phase of stagnation — even decline — in East/West trade cannot be overcome without an improvement in export structures, greater appeal of Eastern products for Western markets and the provision of higher incentives for market access and direct investment in Eastern Europe. We should not forget that in terms of its value, trade between the EC and Switzerland alone exeeds the volume of trade with all the East European CMEA States, including the USSR. Whereas e.g. almost one-quarter of the Soviet Union's export earnings in 1980 stemmed from trade with the EC in 1980 (23 %), this proportion has plummeted in recent years to reach 13 % in 1988. As is generally known, this country's export structure is particularly dependent on energy and raw materials; the fall in energy prices has consequently had a particular impact in this context.

Analysis shows that classical trade agreements shall not suffice to trigger an increase in trade and an intensification of economic ties between Western and Eastern Europe. Such agreements can generate progress in a dismantlement of trade restrictions and above all the creation of Joint Committees can provide a forum for dialogue for regular revision of trade opportunities. In the present situation however it is above all a question of fostering increased economic cooperation at the level of the enterprises, up to and including the promotion of joint ventures. Creativity is required in the framework of cooperation. In its agreements with the Eastern bloc coun-

Cliché Photothèque CCE

Luxembourg, 25 June 1988 —
Signature of the Joint Declaration — CEE/Comecon
From left to right:
Mr J. Delors, President of the Commission of the EC
Mr H-D Genscher, President of the Council of the EC
Mr R. Rohlicek, President of the Executive Committee of the CMEA
Mr V. Sytchev, Secretary of the CMEA

tries, the Community therefore intends, in addition to the necessary classical trade policy regulations in the field of tariffs, quota restrictions and protective clauses to improve above all the framework conditions for the activities of Community enterprises in Eastern Europe. A series of concrete steps in the field of trade cooperation are conceivable.

In detail, contact must be facilitated between our business circles and their direct partners in Eastern Europe. The right of residence and establishment for our businessmen could be improved across the board. Better access to relevant information in the field of foreign trade and balance of payment statistics and other macro-economic data could make economic processes more transparent. Legal safety in the completion of business transactions, clearly regulated arbitration proceedings, the protection of intellectual property and the right to select one's own insurance and transport companies are points which must be discussed in the framework of such negotiations. The facilitation of inter-company cooperation offers a wide field of potential progress.

However the utilization of all these opportunities shall be closely linked to the implementation of the reform process in Eastern Europe. This process must be stepped up in its pace and intensity. The incompatibility of the Eastern countries' economic system remains the most serious obstacle to a rapid expansion of trade. The more elements of economic viability are funnelled into this system, the greater the scope granted to East European companies themselves will be and the more consistently economic processes are left to the forces of the market, the easier it will be to draw full advantage from the opportunities for cooperation. Without successful economic reform, even the most imaginative and comprehensive trade and economic cooperation agreement will remain a dead letter.

How much progress has been achieved in the EC in the development of our relations with the Member States of the CMEA?

The signing of the Joint Declaration between the European Community and the CMEA on 25 June 1988 in Luxembourg marks a turning-point in post-war European history. This declaration paved the way for the normalization of relations and a process which has so far led to the establishment of diplomatic relations between the EC and all the European members of the CMEA with the exception of Romania.

This brought an end to a long period in post-war history in which, under the leadership of the USSR, the East European States showed a lack of comprehension and even disdain for the emergent realities of Western Europe. We welcome the departure from this attitude and regard recognition of the European Community — based on mutual economic and political motives and directed against no one — as part of the reform process which has also been introduced to the foreign policy of the USSR.

This includes not only a new approach towards the question of the geographical scope of the Treaties of Rome which fully include Berlin (West). Treaties and agreements between the EC and third States accordingly include a standard and legally binding 'scope clause' which lays down that:

'This Agreement shall apply. . . to the territories in which the Treaty establishing the European Economic Community is applied, unter the conditions laid down in that Treaty. . .'

This guarantees the application of the relevant agreement to Berlin (West). This scope clause was finally enshrined in the Joint Declaration after two years of tough negotiation. We therefore assume that the previous discord concerning the application of the EEC treaty to Berlin (West) has been settled in the framework of the relations between the EC and all the CMAE States once and for all.

The Joint Declaration is important as a political symbol of the normalization of relations. Its contents stipulate that the contracting parties shall examine the areas in which cooperation may be of interest within the framework of the respective fields of competence of the two organizations. The competences of the CMEA are indisputably more restricted than those of the EC; they do not, in particular, cover trade policy, for which the Community institutions enjoy exclusive competence as far as the EC is concerned. The Community must therefore give priority to an expansion of bilateral relations with the individual member States of the CMEA. It is only the individual CMEA member States that can effectively negotiate on trade policy concessions e.g. customs matters, quota restrictions and above all the actual utilization of import facilities (e.g. the provision of foreign exchange).

All the CMEA member States have accordingly initiated bilateral negotiations or concrete preliminary talks to such negotiations and in some cases this was done long before the final adoption of the EC/CMEA Joint Declaration.

To take stock of the present status of relations between the EC and CMEA States:

■ Negotiations with Hungary have been concluded, leading to the signing on 28 September last year of a trade and economic cooperation agreement which entered into force on 1 December 1988. This agreement extends to the very limits of the possibilities of the EC in the field of trade policy, thus taking account of the process of reform which has made particular headway in Hungary. The agreement moreover creates a broad framework for economic cooperation in fields such as industry, mining, agriculture, scientific research, energy, transport, environmental protection, etc.

A Joint Committee comprising representatives of Hungary and the Community has been established for the purposes of the administration of this agreement. This Committee held its inaugural meeting in Budapest in December 1988 and adopted a working programme for 1989.

On 19 December 1988 an agreement was also signed with Czechoslovakia. It came into force on 1 March 1989 and is to be valid for a period of four years. A trade agreement limited to industrial products, it does not extend to economic cooperation.

In the course of the negotiations, the Czechoslovak side left no doubt about the fact that it wishes to intensify relations in the framework of this agreement and that it aims at a more comprehensive agreement to follow on from this preliminary one.

As far as relations with Poland and Bulgaria are concerned, following a series of preliminary talks with both countries, the Commission elaborated a series of negotiating guidelines adopted by the EC Council of Ministers on 20 February. The phase of concrete negotiations can therefore now begin. The aim is the signing of a trade and economic cooperation agreement with both States. The negotiations with Poland are well on their way and could be concluded by summer this year. The process of reform in Poland should be supported by appropriate concessions on the part of the EC.

The EC Commission conducted final exploratory talks with the German Democratic Republic in January and the Soviet Union in February of this year; it shall now prepare negotiating guidelines which shall subsequently have to be adopted by the Council of Ministers.

It became clear in the preliminary talks that the Soviet Union is above all interested in a comprehensive cooperation agreement, whereas the German Democratic Republic's priorities are trade and trade cooperation. In our opinion — and this incidentally coincides with the opinion of the German Democratic Republic — inter-German trade shall remain unaffected by such an agreement.

The framework conditions for the shaping of future economic cooperation have been or are being established in the negotiations which have been concluded or are still underway. A specific specimen agreement shall have to be found in each individual round of negotiations. There are specific questions and problems for the EC in its bilateral relations with each of the States in question. Opinions also differ among the various CMEA States as to the appropriate combination between the trade and cooperation agreement models. A uniform agreement is therefore neither possible nor desirable at the present stage.

Finally, a word on the frequent reference made by Secretary-General Gorbachev to the 'European house'.

The development and new momentum characterizing West European integration have prompted the East to draw up a concept for a reinforcement of pan-European cooperation, whereby the position of the Soviet Union is that States with different social and economic systems can not only co-exist, but also cooperate on a constructive basis. The framework envisaged by Mr Gorbachev for this cooperation is the *'Common European house'*.

President Delors had the following to say on this subject in his speech to the European Parliament in Strasbourg on 13 January 1989:

'Of course we are aware of the exact geographical size of Europe and of course we wish with all our might that peace, exchange and cooperation shall be the characteristics of the Europe of tomorrow. But we should be wary of exaggerated enthusiasm. To make more clear what I am trying to say, we dream of a "European village" where harmony reigns and where economic and cultural activities take place on the basis of all-round, mutual trust. However if I were to design this village today, I would envisage a house labelled "The European Community". We would be its exclusive architects and would keep the key to the house in a safe place, whereby we would of course open our doors for exchange with our neighbours'.

These words of President Delors are a very vivid expression of the Community's concept of cooperation at a pan-European level, in particular between West and Eastern Europe.

Opening up to the East in the field of training

In mid-1988 we received our first request from Eastern Europe for information on training in Western Europe, together with an invitation to visit the East.

There would be no sense in basing major plans or decisions on our brief experience with Eastern Europe. We shall therefore restrict ourselves to outlining areas of interest in training, as expressed to us by representatives from Eastern Europe and some of our colleagues from the West.

Our limited experience indicates that there are three areas of particular interest to our colleagues in the East:

- What are the trends in the world of training? More particularly, how are links between training and industry developing in the various European countries? What initiatives are being taken to promote such links? What is happening in Western Europe in the area of cooperation between industry and higher education? What forms of cross-border cooperation are to be found? What is the ultimate degree of success of ambitious European programmes?

- What is happening in the area of management training and development? There is evident interest in the operation and content both of western business courses and of continuing training schemes for industrial managers. General strategic management marketing and moves towards automation in services and the practical organization of work are among the topics raised in this context.

- Alongside a general interest in methods and approaches in adult education and the use of technology in training, we were asked more specific questions on the transfer of technology and the successful translation of innovative ideas into products and production units.

The concern of the Eastern Europe countries can be seen both in and behind these questions. They are interested in joint ventures with the West with a view to improving the quality of their products, building up better marketing and management experience, developing the domestic production of basic goods which currently have to be imported, and acquiring hard currency to fund their activities. This is the background against which we must consider and interpret the interest shown by our Eastern European colleagues.

Western colleagues' responses vary according to their specific background. A limited survey we conducted elicited different answers depending on whether respondents came from industry, chambers of commerce, the trade union movement, employers' organizations or higher education and training. If the secretary-general of a European association concerned with vocational training asks the question 'What is of interest to you in Eastern Europe?', the answers will clearly not be economic in nature, although everyone regards trade and economics as the background to the entire East-West movement. With developing countries deep in debt and oil-exporting States hit by low oil prices, there are few expanding markets left in the world. The West is interested in the 284 million potential new customers in the East. But at the same time everyone is persuaded that in today's knowledge-intensive society the primary strategic element in business is no longer physical and financial capital but human capital. If human beings with their creativity, knowledge and commitment are of such strategic importance, then the goal of business is no longer merely profit but also the maintenance and development of that human capital. In this context the human factor, the social dimension of business, acquires prime importance and social policy becomes an essential concomitant of economic policy.

There is much to be learned from venture capitalists in this context. When they consider offering capital to a young entrepreneur, they do not look first at the business and the sector, then at the product and the market and finally at the manager and his (or her) policy, as do the more conventional credit-providers: instead they look first at the manager and his ideas, second at the manager and his drive to succeed, and third at the manager and his chances of success. It is against this background that we must consider and interpret the answers given by our Western colleagues.

- We in the West are interested in building up our knowledge of vocational training and qualifications in Eastern

Jan Rombouts,
Secretary-General, IEFP.

Jan Rombouts *is Secretary-General of the* Institut européen pour la formation professionelle.

[illegible]

Europe. We want to know more about craft qualifications, the value of vocational training in the various countries and the training system in general.

- There is a readiness in the West to engage in cooperation in the field of management training and development. This is confirmed by the observation that 30 000 Western European representatives of science and industry have visited the USSR in recent years.

- Through better knowledge of training structures and practices we hope to get a better picture of the potential for growth in the countries of Eastern Europe, of cultural differences and of models of economic cooperation.

In the light of this mutual interest, the IEFP felt that the time had come to organize, jointly with CEDEFOP, a first East-West conference to give those responsible for training an opportunity to exchange ideas and experiences. The theme chosen for this first conference, which is to be held in Budapest on 18 and 19 January 1990, is 'Quality and training'. The theme will be covered in workshops on three levels:

- what are the standards of basic training and how does it contribute to raising standards in industry and services?

- management training and development in the service of quality in a given technologically controlled production process.

- the issue of the training of trainers as a lever to raise standards.

Those with responsibility for policy emphasize the importance of training and developing human potential; business leaders are faced with shortages of trained and qualified personnel in various parts of Europe; workers stress the need for social policy. In this context, the exchange of ideas and experiences in the area of training in East and West seems to us a step towards closer economic cooperation: cooperation built on people who understand and appreciate each other's qualifications and creativity provides a solid foundation for joint ventures.

It is to be hoped that a meeting of those whose job it is to train the next generation will contribute to the growing cooperation between East and West.

NOWOSTI

The main building of the Moscow State Lomonossow University.

Introduction

Peter Grootings and Ernst Piehl

Apart from the interviews with leading representatives of European institutions mentioned in the editorial, this special issue has two main sections which have deliberately been given a more documentary character to provide a solid basis for the initiated process of exchange of information, experience and ideas with Eastern Europe: on the one hand, we have the familiar 'Bibliographical section' for the majority of issues in recent years, in which the twelve partner institutions of the CEDEFOP 'Documentary Network' have compiled on the whole very varied and useful information. On the other hand, we have asked for contributions from research institutions and/or their leading personalities in the following six CMEA countries: USSR, Poland, German Democratic Republic, Czechoslovakia, Hungary and Bulgaria, whereby our contract partners were commissioned with the following tasks in the framework of premilinary contacts:

- A **summary version** of the documentary monographs to provide a bird's eye view of the complex institutional structure of vocational training, e.g. in the form of the 'age-group pyramid' and state institutions (see the USSR report), in six countries.

- A **long version** of the national monographs, giving a detailed description of the ramified vocational training routes to be found in Eastern Europe and the processes of reform initiated in the fields of training and continuing training, as far as this is possible; these long versions also include additional information of a varied nature from national statistics, publications and research institutions.

Stephan SCHRAPS

Ernst Piehl (left), Peter Grootings

Despite years of cooperation among the research institutes in the framework of international agreements, the various agencies in Eastern Europe are not identical. This made it necessary to conclude contracts with institutes which are partly different in character. As a rule of thumb, it can be said that the selected contract partners in the USSR, Poland, the German Democratic Republic and Czechoslovakia are more involved in subjects related to initial training, whereas the commissioned institutes in Hungary and Bulgaria have additional fields of tasks. This also explains why the following reports focus on different aspects. From its 13 years of experience in Western Europe, CEDEFOP is very familiar with the phenomenon that despite attempts to draft identical contract specifications ('cahiers des changes') for all contracting partners, one finally ends up with relatively divergent reports. This experience is presumably evidence of the fact that education and vocational training policy belongs to the very core of nationally constituted societies in the whole of Europe, a phenomenon which in the short term may aggravate the barriers to international understanding, but which in the long term represents one of the trumps of our continent.

Despite all the differences in the social systems and the economic and technological state of development of West and Eastern Europe, identical, or at least similar key problems and measures to cope with these problems can nevertheless be observed, e.g.:

- relations between the school and the workplace as places of learning and the need to create an equilibrium in the combination between the two to impart both theoretical and practice-related knowledge,

- the changed relationship between initial training and continuing training and

- new additional demands for multidisciplinary, social skills.

We would finally like to ask for the reader's indulgence when reading this issue: the six authors/teams of authors were not able to draft their reports in their own languages, but had to opt for one of three foreign languages: German, English or French. Their reports had to be submitted with strict deadlines, in particular in view of the fact that the postal deliveries between East and Western Europe often takes weeks. Despite these and other technical difficulties, we nevertheless believe that the following reports are not only of high quality but are also both interesting and up-to-date.* This is probably the first time that authentic reports by East European authors have been published in all the nine Community languages — and we are confident that it shall not be the last. On the contrary, this can only mark the beginning of a long-term process of exchange of information and ideas.

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* The full versions of these reports with partially extensive annexes are available from CEDEFOP in English or German: personnel and funding permitting, they shall be translated into further languages and published in the 'CEDEFOP documents' series.

Technical vocational training in the USSR

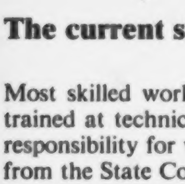
The current situation

Most skilled workers in the USSR are trained at technical vocational schools, responsibility for which was transferred from the State Committee of the USSR for Technical Vocational Training to the newly established State Commitee for National Education in 1988.

The technical vocational schools form the technical vocational training system along with the educational institutions (universities and colleges of technology) which train teachers of engineering, research institutions, the enterprises responsible for the manufacture of teaching aids, the central and regional management bodies, etc.

Until 1988, this system was organizationally the responsibility of the State Committee of the USSR for Technical Vocational Training. However, responsibility in this field, along with national education and university and technical college education, was transferred to the State Committee of the USSR for National Education in the same year.

Some skilled workers are trained (mostly for simpler occupations) in production



Dr W. W. Shapkin

Director of the All-Union Institute for Technical Vocational Training in the USSR, Leningrad

Table 1*
Technical vocational training institutions (responsibility of the State Committee for Technical Vocational Training)

	Number of institutions at year end	Number of trainees x 1 000	Number of school leavers with university entrance certificates x 1 000	Number of skilled workers (graduates) x 1 000
1940	1 551	602	602	499
1960	3 684	1 064	864	741
1970	5 351	2 380	1 837	1 638
1980	7 242	3 659	2 665	2 430
1985	7 783	3 978	2 862	2 576
1986	8 020	4 176	2 935	2 583
thereof: full-time vocational technical secondary schools	7 207	3 744	2 188	1 854
thereof section for those with 8 years of primary education	6 338	2 789	1 088	714
section for general secondary school-leavers	6 171	708	722	787
groups of young people who have no secondary school education (parallel to vocational training)	2 628	247	382	353
evening vocational technical secondary middle schools	813	432	747	729

* *70 years of the Soviet economy, celebratory statistical yearbook*, part M, *'Finance and statistics,'* 1987, p. 422.

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Wladimir Paschkow from the 'Vocational School' No 15 in Charkow working on the robot which he and his schoolmates had developed. The robot ensures that silence is maintained in the classroom and checks the students' answers.

plants and in 'training and production combines'. A number of colleges of technology (engineering schools) also provide skilled worker training for 'more demanding' occupations, listed in a special directory. Only graduates of technical colleges can attain the highest levels of qualification in these occupations. Statistics show that over two-thirds of all young workers are nowadays trained at technical vocational schools, which undoubtedly proves the significance of the system of technical vocational training.

Table 1 shows how the system has developed.

About two-thirds of the young working-class generation are currently trained at over 8 000 technical vocational schools.

It is worth noting in this context that the trend in the training of skilled workers differs in the various parts of the USSR: while the number of trainees in the RSFSR (Russian Soviet Federated Socialist Republic), the Ukraine and Byelorussia has grown 3.5 to 3.7 fold, it has risen 15 to 20 times in the Union Republics of Uzbekistan, Azerbaidjan and Lithuania (see Table 2).

Vocational training at full-time technical vocational secondary schools is divided into three sections:

- the section for those leaving the eighth class, where young people receive a general education up to university entrance level in addition to vocational training (duration: 3, 3.5 or 4 years);
- the section for general secondary school-leavers (duration: 1 to 1.5 years);
- teaching groups for young people who receive vocational training but no general education at full-time technical vocational schools (duration: 1, 1.5 or 2 years).

In the sections for those leaving the eighth class, where trainees receive a general education up to university entrance level, and in the sections for secondary school-leavers training largely focuses on 'demanding' (and, in the latter sections, 'particularly demanding') occupations.

The ratios of trainees in the various sections of the technical vocational schools largely depend on the type of local industry the occupations in which training is provided and the specific socio-economic parameters of the region concerned. The total number of trainees in the various sections in 1986 is shown in Table 1.

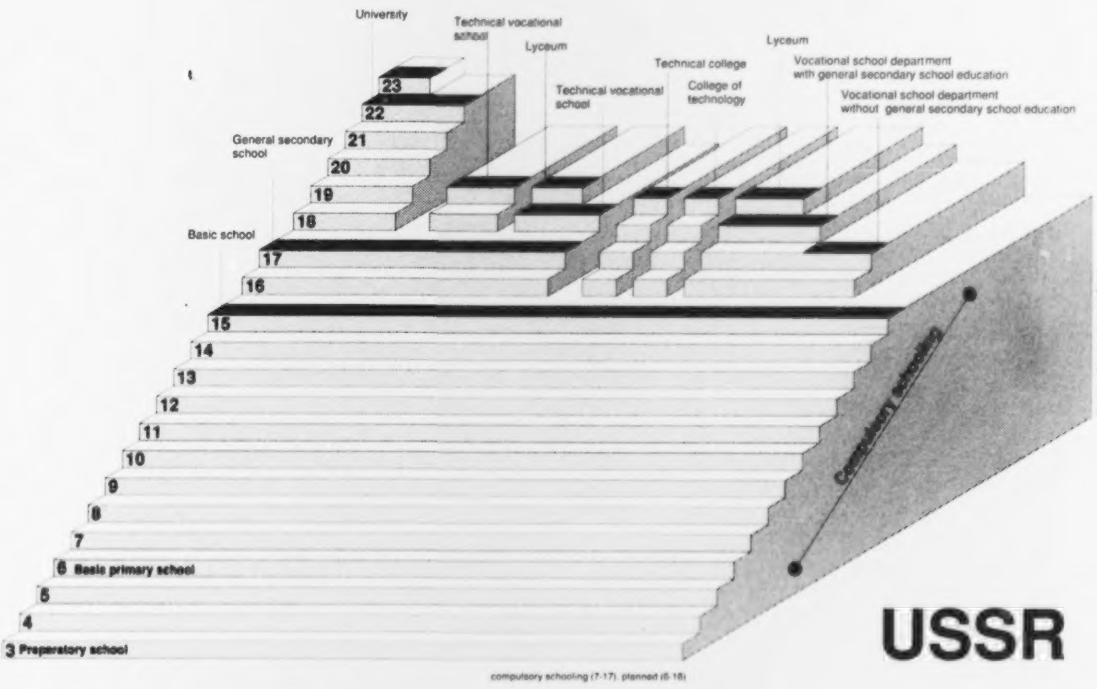
The state technical vocational training system forms part of the uniform system of national education. It has a hierarchical structure. At the top is the State Committee of the USSR, which is also responsible for the school, technical college and university systems.

In most of the Union Republics (and in the two cities of Leningrad and Moscow), regional national education committees have also been set up; some Republics have moreover established ministries of national education.

Table 2*
Number of vocational school graduates in the Union Republics (Training of skilled workers: x 1 000)

	1960	1970	1980	1985	1986
USSR	741.1	1 638.2	2 430.5	2 576.3	2 582.6
RSFSR	444.8	994.6	1 399.3	1 378.1	1 376.5
Byelorussia	144.2	270.7	328.7	427.9	430.8
Uzbekistan	26.2	57.7	83.9	88.5	88.9
Kazakhstan	10.1	41.1	115.2	166.1	169.5
Georgia	5.2	80.6	34.1	43.2	42.7
Azerbaidjan	6.1	29.0	56.4	71.8	71.5
Lithuania	4.2	17.1	24.7	26.5	26.3
Moldavia	6.5	19.1	29.1	31.6	33.2
Latvia	5.5	14.2	20.7	22.6	20.8
Kirghizia	5.6	16.9	30.8	37.6	37.8
Tadjikistan	5.9	12.2	17.0	24.3	25.4
Armenia	2.4	15.0	33.2	30.0	34.9
Turkmenistan	3.5	6.8	18.9	28.6	29.4
Estonia	2.7	4.7	7.9	8.7	8.8

* *70 years of the Soviet economy, celebratory statistical yearbook*, part M, *'Finance and Statistics'*, 1987, p. 423.


University
Technical vocational school
Lyceum
Technical college
Technical vocational school
College of technology
Lyceum
Vocational school department with general secondary school education
Vocational school department without general secondary school education
General secondary school
Basic school
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6 Basic primary school
5
4
3 Preparatory school
Compulsory schooling
USSR
compulsory schooling (7-17), planned (6-18)
Graphics: Rudolf J. Schmitt, Berlin

The vocational training system in the USSR.

The administration of national education is the responsibility of the regional or municipal executive committee of the soviet in some regions and the larger cities and of the national education departments in the districts.

Direct reponsibility for teaching in technical vocational training institutions rests with the vocational training administration (departments) of the committees, ministries, etc., responsible for didactics and methods. Management issues and problems connected with the physical and technical equipment of vocational training institutions are resolved by appropriate specialized departments (groups) attached to the committees.

A management system responsible for educational institutions of all kinds should be both a state and a social system. 'National education councils' are formed within the soviets at all levels, their decisions being implemented by the administration and departments of the regional and municipal executive committees.

The installation of this management structure began in 1988, but national education councils are not yet to be found everywhere. It can thus be said that new, democratic forms of management are currently being put to the test in the national education system.

The training of skilled workers at technical vocational schools is based on occupations or occupation groups, listed in the 'Directory of the occupations in which skilled workers can be trained at various types of school', and on the needs (requests) of appropriate enterprises, on whose behalf the training is provided.

Those who pass the final examination at a technical vocational school are classified according to qualification categories (usually category 3) and awarded corresponding diplomas. General secondary school-leavers receive university entrance certificates.

The content of the training in the various occupations or occupation groups as reflected in the curriculum is determined centrally by specialist commissions consisting of representatives of the technical vocational training system, members of the research institutes of various sectors of industry and representatives of the enterprises.

The timetables are drawn up on the same pattern, i.e. they all have the same structure, the structure of the general education cycle also having been standardized, which means that examination, counselling and holiday periods are the same everywhere. The content and structure of the polytechnical and trade-specific subjects and the practical part of the course nevertheless vary for certain occupations/occupational groups.

A curriculum includes the following documentation:

- typical skills of the skilled worker
- timetable
- general syllabus
- syllabuses for the trade-specific subjects, the polytechnical subjects and the practical part of the course
- list of teaching aids for the teaching staff and recommendations relating to technical equipment in training workshops (training catering establishments, etc.)

The syllabuses are endorsed by the State agencies responsible for education and represent compulsory framework documentation. Given the specific features of certain production processes and the continuing development of technology, the commissions of the technical vocational schools are entitled to amend syllabuses in agreement with the enterprises and the regional education authorities, although no such amendment may affect more than 15 % of the total number of hours set aside for vocational training.

The technical vocational school year is the same everywhere, 1 September to 30 June, although teaching continued until mid-July last school year. Summer holidays last six weeks and winter holidays two weeks.

Instruction is given on six days of the week for a total of 36 hours.

Theoretical instruction is given in the classroom and comprises normal lessons, experiments, seminars, counselling, colloquia and examinations.

Practical training consists of lessons, practical production and final skill examinations, instruction being given in the training workshops of the technical vocational school, the training departments (factory buildings) of the enterprise or in the production departments proper. Training in practical production is usually provided in the enterprises themselves.

Computer technology is currently being introduced into vocational training. Fixed computer classes are being installed in the technical vocational schools (with mobile ones for rural areas). Various packages of educational software for different types of computer and the required networks of microprocessor-based simulators are being developed and introduced. It must be emphasized, however, that the teaching materials at many technical vocational schools in a number of regions of the USSR urgently require modernization and that the quality of the computer facilities in vocational training institutions is still inadequate in the present five-year period.

Teachers of general technical and trade-specific subjects are trained at universities and in the teacher training faculties of the technical, agricultural, pedagogical and civil engineering colleges.

Trainers (masters of production training) are trained at the industrial teacher training colleges of technology.

Moldvay/STERN

Red Square.

Teachers for the technical vocational schools in the USSR are trained at a total of 123 universities and 70 colleges of technology.

All vocational school teachers are expected to undergo retraining and in-service training at the All-Union institute for the in-service training of vocational school teachers (Leningrad) or at the branches of this institute in the various Union Republics at least once every five years.

Since 1974 vocational school teachers and trainers have been tested every five years to evaluate their professional competence and to enable decisions to be taken on their salaries, which are graded.

Main problems encountered in the development of the vocational training system

By the second half of the 1980s, the vocational training system, although extensively developed in the 1960s and 1970s, was no longer meeting the needs of the economy in a country preparing for the revolutionary restructuring of its society and for radical economic reform.

The standards expected from the general education and vocational training of skilled workers and their professional skills were inadequate. The level of the moral, aesthetic and economic education of trainees and even the conditions under which the personality of young workers was developed, also failed to comply with the image of workers at the current level of social development.

The rapid change in production methods triggered by the intensive development of science and technology and in the structures of workers' qualifications called for a radical change in the structure of the occupations for which skilled workers are trained at technical vocational schools.

This is illustrated by the following figures which show the rise in the number of mechanized and automated production units installed in industrial enterprises during the period of the 11th five-year plan: (see Table 3).

The average annual growth rate has since risen. The report of the State Committee of the USSR for Statistics entitled *Economic reform: Rate and reserves. The socio-economic development of the USSR in 1988,* for example, states that 'some 9 000 mechanized production units have been installed in industry.'[1] In the same period, the trend in the numbers of skilled workers trained at full-time technical vocational schools to operate the abovementioned production units was shown in Table 4.

This example reveals the major discrepancies between the rate at which the modern technologies are being introduced and the standards applied in the training of skilled workers at technical

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[1] *Izvestiya,* No 22, 22 January 1989, p. 2.

Table 3*

Production units	mechanical	automated	total
1981	145 210	27 386	172 596
1985	161 601	34 278	195 879
Average annual increase during the period of the 11th five-year plan	3 300	1 380	4 660

* *70 years of the Soviet economy, celebratory statistical yearbook*, part M. *'Finance and Statistics'*, 1987, p. 87.

vocational schools. A remarkable feature is the narrow occupational profile for which skilled workers are trained at a number of vocational schools.

The training content, the level of the general technical training of those leaving these schools and the technical equipment in the schools were not, as a rule, appropriate to the task of familiarizing young skilled workers with their new production functions or of generating new occupations.

Table 4*

Occupation	1983	1984	1985	1986
Installers of automatic production units, machine tools and sets of machines	825	1 067	1 047	2 087
Operators of automatic and semi-automatic production units	1 152	1 805	1 496	1 643

* *70 years of the Soviet economy, celebratory statistical yearbook, 'Finance and Statistics'*, 1987, p. 423.

In most technical vocational schools, skilled workers were trained for the whole range of occupations needed by just one enterprise ('mother enterprise').

This has caused a number of problems, mainly connected with the basic teaching materials needed in technical vocational schools (e.g. technical equipment in the training workshop) to meet the requirements of each occupation. The rise in the prices of the modern teaching teaching aids needed for the type of training of skilled workers in new occupations that is commensurate with the requirements of scientific and technological progress has exacerbated these problems.

The tendency to standardize all types of full-time vocational schools and to create uniform technical vocational secondary schools with a three-year course, during which the emphasis is on giving those leaving general primary schools (eighth class) a general education up to university entrance level in addition to vocational training, has proved unfortunate in several respects. As already mentioned, syllabuses were rigidly standardized for the whole training period.

Excessive centralization and regulation of the teaching and education process has restricted the initiative of collectives of teachers and trainees, impeded the spread of democratic principles at school, curtailed self-management in technical vocational schools and had an adverse effect on the preparation of trainees for life in modern society.

As vocational counselling and guidance are not sufficiently developed, there has been considerable fluctuation among vocational school-leavers and graduates of the technical vocational schools have changed to other occupations with increasing frequency.

The interaction between general and vocational schools and between vocational schools, colleges of technology and universities, all elements of a self-contained system of life-long learning, has been badly organized in practice.

The problems arising during the development of the vocational training system necessitated a whole series of representative complex research projects in important areas of science. They were carried out under the 11th and then the 12th five-year plan by a number of scientific institutions and universities in the USSR on the basis of uniform coordination plans.

This research into various development problems, which may also be highly relevant at international level, has been and is still being undertaken as a multilateral cooperation project involving groups of scientists from various CMEA countries on the basis of the plans and programmes agreed at the annual conferences.

Structural and organizational reform of the vocational training system

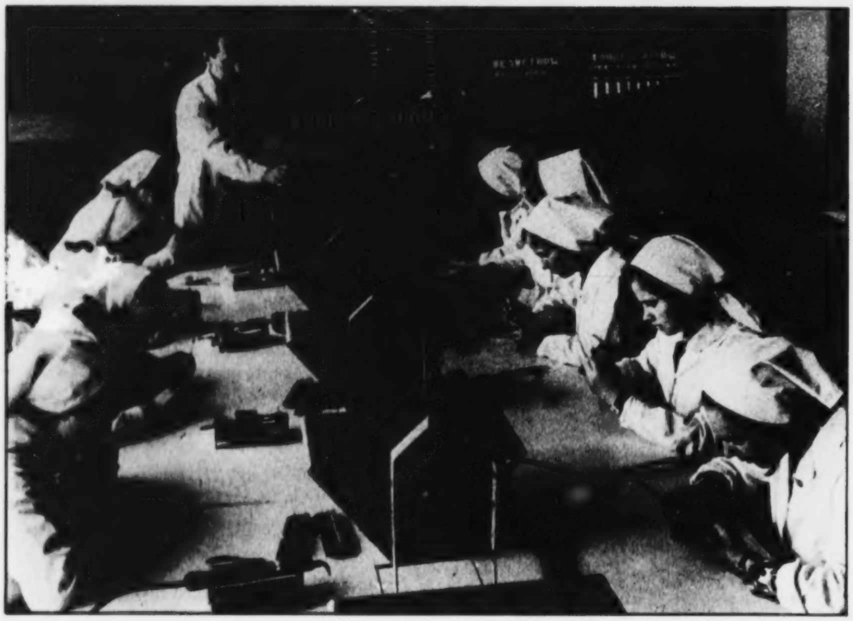
The impending radical restructuring of the whole system of national education made necessary the elaboration of operational development concepts to be established for the closely linked system of

- continuing (life-long) education
- general secondary-school education
- technical vocational training
- college and university education.

A concept for the development of technical vocational training in the USSR was established in 1988. It provides for a radical reform of the organizational structure of the vocational training system.

Organizational structure of technical vocational training

The organizational structure of technical vocational training (types of training institution) and the forms and duration of training must be commensurate with the



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Technical vocational school in the Kiev works for electronic equipment and controls.

current state of and progressive changes in the structure of employees' occupations and qualifications.

The technical vocational training institutions must be a permanent feature of a self-contained system of 'life-long' learning, i.e. the general preparation undertaken at the previous stages of the school system must be consolidated and complemented by vocational training in these institutions, with the foundations laid for advanced training and skilltraining schemes (up to the highest possible level of qualification) and for the all-round development of the trainee's personality in line with his interests and abilities.

Given the plans to speed up the country's socio-economic development, the technical vocational school must be developed dynamically, flexibly and in a wide range of organizational forms.

Top priority in these efforts is given to the further development of the training of skilled workers for more demanding core occupations and for broadly-based occupation profiles. This training will be based primarily on a middle-level general education, with the graduates of the 'basic' primary school (ninth class) still having the chance to obtain a vocational qualification.

In view of the rapid advance of new technologies, uneven technical development in various sectors of the economy and the plans to introduce various effective forms of prevocational training and retraining of workers in new key technologies in the near future, it is proposed that the vocational training institutions should be split into three levels (upper, middle and basic).

Basic technical vocational training is provided in special classes of general schools, in the appropriate sections of the technical vocational schools, in the 'trade and work schools' and within the system of on-the-job vocational training in the form of various courses. Those leaving are awarded a vocational qualification for a narrow, traditional occupational profile that does not require any special theoretical training. A university entrance certificate can also be obtained by attending general education evening courses.

The second level of vocational training, i.e. the training of highly qualified skilled workers for complex, broadly-based occupational profiles requiring special theoretical training and the successful completion, previously or simultaneously, of a course of general education, is provided by the technical vocational schools. The general education of those leaving the 'compulsory schools' (ninth class) is attuned to the occupation for which they are being trained.

The third level of vocational training, i.e. the training of highly qualified skilled workers for particularly complex key technology occupations, is provided by a new type of training establishment: the technical lyceum (highest vocational school level). Training institutions of this type normally train secondary school-leavers who are already holders of a vocational qualification in an appropriate occupational field.

The trade and work schools train young people who do not want to go on learning after completing their compulsory education but to go out to work. These trade and work schools may be separate educational institutions or attached to technical vocational schools or regional vocational training centres.

Where necessary, special trade and work schools may be established, their main tasks being the vocational training, rehabilitation and social integration of handicapped young people and adults.

The technical vocational schools train those leaving compulsory schools (ninth class) and secondary schools. They have two departments:

- a department for the those leaving the ninth class, who complete a course of both vocational training and secondary school education. If certain requirements are satisfied (relating to the teaching staff and technical equipment), this department can also take the form of the vocational section of the general secondary school;
- a department for general secondary school-leavers, who complete a course of vocational training in more demanding occupations for which the completion of secondary school education is a requirement.

Both departments of the technical vocational schools provide broadly-based training in the occupational groups concerned, the trainees acquiring a sound general technical and special theoretical grounding. The profile and level of the work-related education received at general schools must be taken into account at the level of decision-making on the length of training.

Technical vocational school-leavers are awarded a skilled worker's diploma.

The technical lyceums train highly qualified workers for particularly demanding occupations. Only young people with a secondary school leaving certificate are admitted to these institutions. Preference is given to secondary school-leavers with appropriate pre-vocational training who show particular aptitude for solving various technical problems in an unconventional way. Those leaving the technical lyceums are awarded a highly qualified skilled worker's diploma and thus become 'certified skilled workers'.

In view of the pace at which science and technology are developing, the number of young people trained at technical lyceums (and technical vocational schools in the case of secondary school-leavers is to be increased in the future.

The technical vocational training institutions may also arrange evening courses and retraining and continuing training courses for adults.

All the educational institutions (and departments) referred to above are intended to be autonomous. However, they may be amalgamated with other educational institutions or set up as training centres for a sector or the whole of industry. They may also be transformed into 'scientific and educational production centres' (continuing training centres) under an agreement with various industrial enterprises and institutions.

Most centres of this kind will be installed near fairly large innovative manufacturing enterprises which are trying out new techniques. They may consist, for example, of technical vocational-training institutions, colleges and universities, the aim being to ensure that engineers, technicians and certified workers working as a team are trained to operate automated sectors of production and complex production equipment.

One advantage of these combined centres will be the high level of concentration of modern production technology and the gearing of the training content to the real production situation and the practical needs of the enterprises.

A major precondition for continuing, life-long learning is the cohesion of syllabuses at the various levels of training, this also being a prerequisite for the accelerated training of highly qualified workers in various qualification categories.

DPA

The possibility of choosing not only an occupation but also an appropriate training institution enables the trainee's personal interests to be linked to practical needs of society.

The creation of a broad network of training institutions will also mean the installation of a mechanism to ensure that the need for the constant updating of young and adult workers' vocational and cultural standards is satisfied. Appropriate limited liability companies, in some cases as joint ventures with foreign firms, might, e.g. be established with the specific task of providing initial and continuing training for skilled workers.

Social expectations and trends in the development of vocational education in Poland

Poland is one of the countries with the highest birth rates. Since the peaks and slumps of demographic growth tend to be irregular, the needs of the population in terms of health care, education and training, employment, old age pensions and housing construction also tend to fluctuate.

Poland is relatively rich in a number of natural resources, e.g. coal and lignite, sulphur, salt, copper, etc. Despite its modernization in the 1970s, Polish industry has already become obsolete making a new process of modernization necessary. 80 % of agriculture is privately-owned and there is still a large potential of productive areas. However, since many agricultural holdings are run by older farmers, Polish agriculture is not as efficient as it might be; there are nevertheless an increasing number of holdings whose production capacity is comparable to that of highly industrialized nations. However, Poland's greatest resources are its human resources, even if correct utilization of the people's qualifications is a problem which has yet to be solved.

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The cultural situation of Polish society is extremely heterogeneous. Polish culture has an international reputation, notably in fields such as music, the theatre, cinema, literature and art. At the same time people living in small towns and villages — corresponding to the conditions of people at the turn of the century — still lack sufficient access to cultural facilities. One consequence of this phenomenon, amongst others, is the departure of young people from culturally disadvantaged areas.

Vocational education always satisfies — to a certain degree — the demands of society, its economy and culture. This is because it supplies young workers ready to perform different tasks in different posts. The level of manpower training is of considerable importance for the country, its people, its economy and its culture. At the same time, people responsible for vocational education and training expect society to create adequate framework conditions for the fulfilment of their tasks.

At a time when Polish society is seeking new solutions to stimulate the development and modernization of its economy — in order to reduce its consumption of energy and materials and, as a consequence, to increase productivity rates and living standards — the human factor, i.e. workers representing different specializations and levels of qualification, is beginning to assume a role of particular importance. Vocational educa-

Stephan SCHRAPS

Professor Kaczor at CEDEFOP in the process of explaining the Polish vocational training system.

tion can therefore be considered as a driving force.

Although we have few long-term government projects on economic development trends, one can nevertheless refer to social expectations with respect to the education system, including vocational education, in terms of personality traits. Let us discuss some of them below.

The Polish education system and its objectives

■ The State family welfare service in Poland offers the following measures: various forms of maternity leave, among others a number of years of so-called 'child-raising leave', crèches for one to three-year-old children, a further state-financed pre-school system (four to six-year-olds), primary school (seven to 15-year-olds), secondary schools (with or without the upper secondary leaving certificate giving access to further education — 15 to 18/19-year-olds), specialized colleges of higher education (one to two years following the upper secondary school leaving certificate), universities (four to six years of study). There are also special schools for disabled children and youngsters.

Adequate formulation of vocational education goals requires long-term forecasts of the country's social, economic and cultural development. The fact, however, that information is lacking in certain fields, as mentioned above, does not mean that no projects or studies are available in these fields. In the programme elaborated by the 'Polska 2000' Research and Forecasting Committee of the Polish Academy of Sciences, for example, a clear-cut option for the 'science-consuming' development of the Polish economy has been presented. It seems necessary to adopt this approach in the determination of trends in vocational education development (transformation). At the same time, it is necessary to take into account certain characteristics of the Polish economy (for example in Poland, more energy is needed than in other countries for the heating of houses and it will take some time to catch up with so-called industrialized technology).

Utilization of the well-known characteristics of civilizational and cultural development permits certain conclusions on the formulation of prospective vocational education goals. We are of the opinion that the vocational education ideal (human being — citizen — worker), already examined in other publications, may be preserved in the future, provided that it is subject to further clarification and interpretation.

As long-term effects are most significant in education,[1] the formulation of prospective goals is of great importance. At the same time, however, if we do not define these goals with sufficient clarity, we may be faced with difficulties in their practical implementation (in the form of practical tasks) at the level of schools and other educational institutions. Careful attention is therefore devoted to these problems in Poland.

Warsaw — a view of the old market-place.

Kanus/ULLSTEIN

Principles of vocational education transformation

It would seem appropriate to discuss two principles:

■ the principle of continuity of education:

■ the principle of complexity in the transformation of vocational education.

According to the principle of continuity, because of the changes occurring everywhere, people are constantly forced to adapt to new situations and to engage in a continuing process of learning. None of the existing educational levels can therefore be regarded as a final stage of education. Moreover, we must also bear in mind that no educational level is the only source of information or the only place where abilities and personality are developed. It must be taken for granted that there are many such sources and that there will soon be even more. If we respect the principle of continuity in educational practice, we may have a chance of overcoming formalism and superficiality in education. The most important are all the factors which contribute to the increase of quality and effectiveness, manifested in the results obtained on different levels (for example in the attitudes of school-leavers). This principle may favour the application of the idea of the subjective treatment of pupils, as the quality of education will then be superior to the mere observance of curricula. The principle of continuity may have a considerable influence upon the individual approach in education.

The principle of complexity makes us aware of the necessity to anticipate the results of partial activities for the achievement of final goals. Here we are referring to the necessity to apply solutions, e. g. modules. Modules are combined in such a way as to create a new quality without entailing the introduction of changes to other elements of the system.

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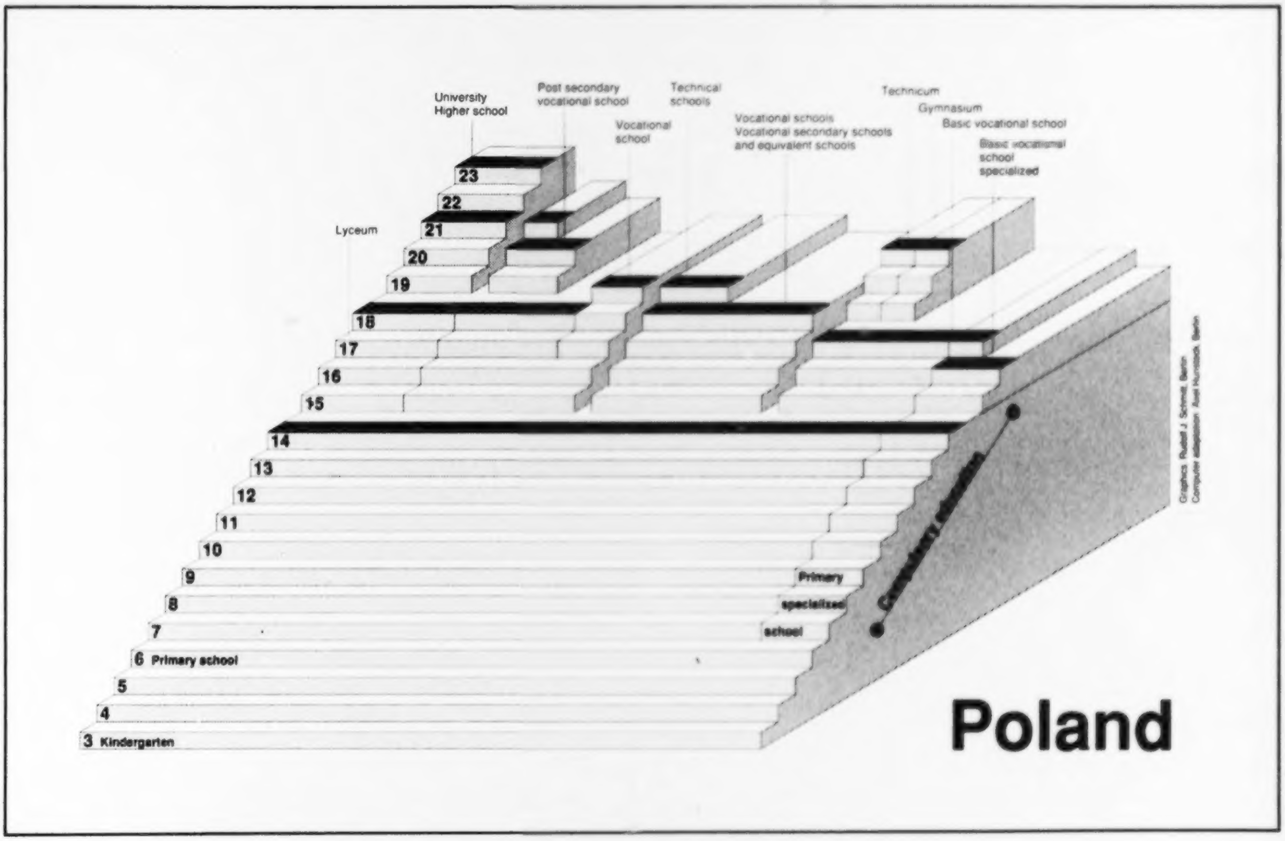
[1] See 'Bliskie i dalekie cele wychovania' (Short- and long-term educational objectives), Warsaw 1987, pp. 253, 393.



Graphics Rudolf J. Schmitt, Berlin
Computer adaptation Axel Hunstock, Berlin

The vocational training system in Poland.

The need for the introduction of changes in the content of vocational education

The content of vocational education should be derived from vocational educational goals and tasks. The proportion of theory and practice, including contents of general and vocational education, should therefore stem from the occupational characteristics of the leavers of a given type of school. Similarly, the period of schooling and the period of time allocated for vocational practice should depend on definite goals, which should in turn be included in occupational characteristics. In comparison with the accepted practice hitherto, this may seem an almost revolutionary suggestion and may arouse objections on both sides. We are of the opinion, however, that it is necessary to apply this approach if we are to avoid mistakes in the programming of vocational content. Having referred to general goals of education, presented in the form of the human being/citizen/worker corollary and the classification of occupations and vocational specializations, which are a reflection of economic and cultural needs, the procedure should lead to the description of occupations and vocational specializations, followed by the development of the above-mentioned occupational characteristics of the leavers. The characteristics consist of the clear presentation of the goals and tasks to be performed in the course of school-based education. It should include the list of required abilities, skills and attitudes (personality traits in different arrangements), to be acquired and developed in the course of schooling. We are referring here to initial qualifications; in the period of occupational adaptation, school-leavers will learn other necessary skills and subsequently, as a result of work experience and further training, they will master their jobs. We thus accept the need for the continuous upgrading of skills, probably within the so-called system of 'gradual workers' training'. Teams consisting of experts from science and technology and vocational teachers would seem to be the most competent as far as the development of occupational characteristics is concerned.

During the work on educational plans and the content of teaching, it transpired that it was necessary to considerably reduce the number of subjects (either in the form of integration or regrouping of subjects) as a better means of achieving the final goals.

It seems that occupational characteristics also influence the period of schooling.

We opt for generally outlined curricula, as opposed to traditional curricula, as the former present content in the form of problems, thus allowing teachers to interpret content in accordance with the actual state of the art. Both occupational characteristics and generally outlined curricula will make education comparable and equivalent in every school. As far as specialized subjects are concerned, however, the teaching staff (with the assistance of subject teams or problem groups) should be responsible for the selection of up to 50% of contents. This will permit the achievement of a high level of school socialization (rights and duties) and an emphasis of its individual character; this is obviously to be regarded in the light of local circumstances, teachers' dispositions, cooperation with relevant economic sectors, the local environment, etc. Content does not only mean curricula. Handbooks, teachers' manuals, exercises and many other didactic aids are also of considerable importance. Despite the development of modern teaching techniques, e. g. video, an aid as useful as the handbook has as yet to be invented. It looks as if it will remain without any serious competitor for many years to come and for this reason it should be constantly assessed and evaluated, if it is to fulfil its function in accordance with the wishes of interested groups of people.

Popular and professional literature, i. e. books and periodicals, is also of great importance. In order to prevent duplication of effort, we propose improved cooperation between school libraries and enterprises, on the one hand, and school libraries and information centres attached to the Chief Technical Organization, on the other; this is chiefly of relevance to foreign books and periodicals.

A significant role could be played by computerized information retrieval systems as it is very important to obtain the latest information as quickly as possible. It is thus necessary to learn how to make use of these systems *today*.

Vocational guidance

Vocational schools are obliged to create framework conditions promoting the acquisition of knowledge and skills and the development of students' personalities. Their function cannot be reduced to merely granting certificates and diplomas. Whether or not these goals are achieved depends on both the primary school and vocational guidance, which is part of career guidance. Vocational and educational guidance will perhaps undertake efforts aimed at helping students to answer a much broader question: how to live? And human life is to a great extent occupational life, in the course of which something material or immaterial is created, people serve other people or society, or even mankind. This approach makes it necessary to conduct a thorough analysis of work functions in human life, i. e. productive and creative functions.

In this context, work performance, vocational education and occupational decision-making are closely intertwined with the system of values.

Irrespective of whether we decide to improve the existing system of vocational guidance or whether we attempt to develop a new one in its place, it seems expedient to analyse the role played by participants of these processes in the immediate and more distant future. As schooling is compulsory up to 16-18 years of age, and school teachers are most competent as far as all-round knowledge of pupils is concerned, the school ought to coordinate vocational (career) guidance processes in their entirety.

If we assume that all aptitudes and talents (not necessarily intellectual) may be useful for an individual and society, we will probably find useful predispositions in the majority of pupils, predispositions that should be developed and made use of in work performance.

Schools should be prepared to perform these functions, although admittedly this is a process which shall take some time. The school is a community of teachers and pupils, cooperating with parents, workplaces and the local environment. Teachers are leaders of educational processes. Their duty is to make use of natural and simulated situations to encourage pupils to adapt and adopt socially accepted values. It seems that the main task of the teacher is to encourage pupils to analyse their value systems, to help them make independent decisions. This is an extremely difficult task which touches upon the ethical dimension of vocational guidance, i. e. the aspect determining human development. The training of teachers for the performance of this task must therefore begin at the level of initial teacher training, and continue throughout postgraduate studies.

Vocational teachers

Of all the teachers working in vocational schools, the group largest in number consists of the teachers of vocational theory and practice. These teachers are responsible for the level of vocational preparation of young people. The recent nationwide survey on occupational status showed that teachers are in second position just behind physicians. If we compare this situation to the economic status of teachers, the situation is much bleaker and even discredits society and the authorities for their toleration of teachers' extremely low salaries. The material status of teachers has made serious inroads into their social status. The headquarters of the Polish Teachers' Association and the Experts' Committee on the National Education have officially deplored this situation. What can be done in this context to make the teacher an initiator of desirable changes in vocational schools? Alongside measures aimed at the improvement of the material status of teachers, measures promoting their social status will be of considerable importance, one example of which may be the subjective treatment of teachers by the education authorities.

The improvement of the social status of teachers to a large extent depends on the real and formal qualifications of vocational teachers. The requirement that all teachers working in vocational schools should have completed higher education has almost been fulfilled as far as teachers of general subjects and vocational theory are concerned. The situation is not as positive, and is likely to deteriorate in the future, with respect to teachers of vocational practice. The idea that one teacher should teach both theory and practice is difficult to put into practice (at least in the sense of verification), a factor which is not easy to understand in the light of the positive experience of agricultural schools in this respect. Even more important, however, is that teachers of vocational practice ought to be highly qualified, both in their specializations and pedagogics; they ought to be well-mannered and cultured and set an example to their pupils. This brings us to another problem, i. e. what is more important: a diploma or actual skills, knowledge, culture, etc.? All types of diplomas and certificates have so far met with greater acceptance than real qualifications, although the latter would seem to be essential for the final assessment of teachers, as they influence the results of teaching.

Our research has led to a number of proposals on the improvement of training for vocational teachers, the most important of which are as follows:

- Vocational teachers should be trained by technical universities, higher colleges of economic studies, agricultural academies, medical schools, etc., all of them providing future teachers with pedagogical knowledge;
- The abovementioned establishments of higher education should employ practically oriented scientific methods to improve the level of their teaching. Academic teachers should also have on-the-job experience in the specializations they teach;
- Schools providing practical experience linked to the establishments of higher education are an important element of teacher training.

Obviously there is no single approach to teacher training. However, this training ought to provide the qualifications necessary for a person to work as a teacher and serve as a basis for further training.

The adoption of certain ideas by teachers will be of decisive importance for the transformation of vocational education. It shall therefore be necessary to organize in-service training with the emphasis on guided self-education.

The great number of tasks in this field make it necessary to seek effective solutions. We are of the opinion that establishments of higher education, institutes of the various ministries and the enterprises ought to collaborate within the system of in-service training of teachers. At the moment this system is organized and implemented by the Teacher Training Centre and its regional branches. As far as vocational teachers are concerned, it is necessary (and this is a demand which has been formulated for some time) for them to regularly update and renew their knowledge within industry, development centres and institutes; this also applies to teachers of vocational practice.

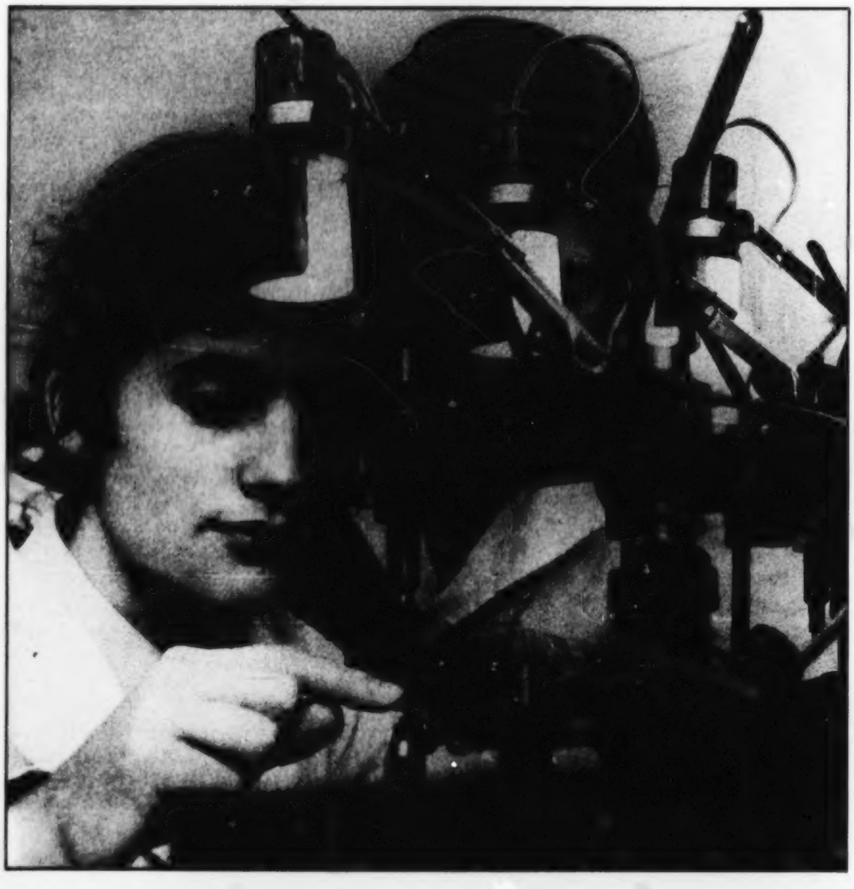
As experience and research to date demonstrate, another form of in-service training of teachers can be in the framework of 'subject teams', grouping together teachers of a given subject who work either in one school or at different schools. We consider this form to be of considerable importance, as it implies coping with the actual teaching problems.

The abovementioned proposals also refer to boarding-school teachers and teachers involved in out-of-school activities.

The infrastructure of vocational schools and their relationship with the economy and culture

If vocational education is to provide initial qualifications satisfying social demands, it shall require not only well-trained teachers, but also modern laboratories, workshops and properly organized practical training in enterprises.

The future of vocational schools shall depend on the degree and diversity of its links with the national economy and industry. The enterprises should therefore be encouraged to become joint managers of schools and take an active interest in the level of manpower training, which should be recognized as a source of skilled workers.



DPA

A decisive role in practical training is played by workshops and on-the-job work experience/traineeships. This is connected to the equipment of workshops with machines and devices, as well as tools and materials necessary for the fulfilment of different training tasks. The duties of the enterprises in this respect should be defined by separate agreements with schools on a case by case basis. The results of such agreements should not to be temporary, but long-term advantages.

As experience shows, the most promising and advantageous links are those twinning schools and enterprises which result in long-term contracts for the supply of products, final products or services, stipulating not only the quantity and the price of production, but also the degree and scope of skills and knowledge acquired by the trainees. Many vocational schools shall be able to extend the scope of paid services (mechanical, electrical, electronic, clothing, mercantile, etc.) as a contribution to the idea of self-financing education.

An important role in practical training, but also in vocational theory, is played by work experience. Work experience schemes should conclude with company-based examinations with the participation of teachers, the results of which should count towards the student's final assessment.

Management and administration of vocational schools

The management and administration of vocational schools is an activity aimed at making vocational schools function in accordance with predetermined goals. This applies, among others, to the structure of school subjects, the planning of qualified staff and the comparability of occupations and education levels. School management and administration also entail school supervision and control, exercised for the purpose of the achievement of predetermined goals. The notion of school supervision is associated with advisory and monitoring activities aimed at the comparison of the achieved results with predetermined goals, with due consideration to the overall framework conditions.

In Poland, the central institution coordinating vocational education activities as a whole is the Ministry of National Education. The Ministry of National Education should be given certain competences (legal capacities) *vis-à-vis* the

Warsaw — general view of the city.

ministries responsible for training in the respective fields.

The central management and administration of vocational schools implies fair assessment of vocational schools, based on definite criteria. This requires the development of suitable criteria and their verification. This is an extremely complex task, as those who have been working on the criteria of work performance assessment for many years will confirm.

Vocational training administration boards, at central and *vaivode* levels, are expected to display their confidence in school heads and teachers and to impart certain competences to them. This is necessary if schools are to function properly. At the same time, partnership is expected — partnership based on legal regulations and principles on the levels to be achieved. If headmasters are to manage their schools successfully, they must have the right to take decisions and be responsible for their decisions. The situation is similar as far as the staff is concerned. If creative attitudes of teachers are to be translated into facts, the resolutions passed by staff assemblies ought to be respected by education authorities. Conditions promoting the status of students should be created. The student ought to be allowed to prepare himself for different roles; he should be equipped with sufficient skills to start working in an occupational cluster.

The relations between vocational education and science

Despite the considerable contribution of science to vocational education theory, the programming of goals and content, teaching methods and aids, expectations and demands in this respect are nevertheless far from satisfied. If we are to overcome the apparent contrariety between theory and practice (impossible to rationally justify), it shall be necessary to present arguments supporting the statement that a good theory is the best practice. Theory explains categories of processess and allows the prediction of the results of our action in particular circumstances. If we accept the above interpretation of theory and its functions, we shall have to concede that not only theoreticians, who seek and attempt to define regularities, but also practitioners, who transform reality, are interested in its development. On the basis of a good theory, practitioners are not only able to answer questions about the nature of and reasons for a situation (they understand the reasons for their success or failure), but also to predict, with greater probability, the consequences of their decisions. This, however, requires that all the participants in educational processes abandon their pride and conceit and instead adopt a modest and unassertive attitude towards what they know and are capable of.

If theory is to satisfy practical demands (including educational policy) more effectively, accurate and detailed questions ought to be formulated. It is not enough to put forward slogans like: we need curricula, methods, handbooks, regulations, workshops, etc., as each of these problems consists of well-defined and clear elements, as well as blanks. What is also important is how detailed theoretical works are. Principles such as the right of teachers to adopt creative attitudes, their right to take risks, etc., are commonly respected. In practice, however, there are teachers who are beginners and need examples to follow and, alongside them, experienced teachers able to suggest certain solutions themselves.

In this context, the following fields of research come into the foreground, as they seem particularly important for the present and the future of vocational education. Teachers interested in innovations ought to take part in this research.

■ Further improvement of vocational education terminology. One of the most urgent tasks in this respect is to make terminological dictionaries easily available.

In this context we should like to underline the particular importance of the popularization of the findings of educational science and other sciences which make a contribution to educational science.

■ When the Experts' Committee on National Education determines directions for the development of education, including vocational education, the demands of practice concerning the goals of education and the means of achieving these objectives (stages, modules, circumstances, etc.) must be taken into account. Remote goals, with a detailed presentation of stages leading to their achievement, may encourage teachers to actively participate in the process of achieving these final goals. The daily routine of teachers, school supervisors and school counsellors ought to be made sensible and satisfying, as this will provide favourable conditions for the attainment of predetermined goals.

■ A permanent task of research centres ought to be the improvement of theoretical foundations for the occupational characteristics of school-leavers and curricula. This is not enough, however. The education authorities must contribute to the training of teachers and other specialists responsible for occupational characteristics and curricula. It is likely that the fulfilment of the latter task (the training of teachers and other specialists) would promote the fulfilment of the former one (the development of theoretical foundations). Guidelines, recommendations, technologies and examples shall be utilized by the trained staff. The fulfilment of this dual task shall require changes in decision-making policy, in attitudes towards intellectual work. Intellectual work, as is well known, is not held in very high esteem and this low esteem even appears to be waning.

Despite considerable achievements in the field of literature for vocational teachers (the Vocational Education Library series amounting up to 100 publications is worthy of mention here), the demand for methodological publications has not yet been satisfied. The difficulty lies in the degree of generalization. Some teachers want detailed instructions, full of examples, while others consider them naïve, beneath their dignity, offensive and violating their right to independence and creativity. It seems that a reasonable degree of generalization, as well as examples permitting the development and creation of new solutions, would be the best solution. The situation is similar as regards instructions for the authors of vocational handbooks. Most of the authors are teachers or workers; and research centres ought to offer them help in their work.

■ Another permanent task of scientific centres, especially those attached to the ministries, should be research into the positive and negative results of decision-making policy. These results could obviously be taken into account in the revision of decisions already taken.

We need repeated research aimed at the development of a diagnosis concerning the state of vocational education as a whole, or the state of its particular elements. Such diagnoses are necessary, for they give us information on the degree of achievement of predetermined goals and help us improve school work. This kind of research should be coordinated centrally, to facilitate comparability of the results obtained by different research centres.

■ Changes in the education system, including vocational education, ought to be preceded by various types of experiments. One of these is the development and verification of the so-called 'Schools of the future'. Scientific institutions ought to be in charge of such experiments. The legal situation, however, and the slow pace of progress when it is a question of amendment to legislative acts, delay such experiments. The idea of rebuilding the education system should make the transition from the stage of slogans to the stage of actual implementation as quickly as possible.

Experiments could be conducted under the auspices of the National Committee on Education Development. This does not mean, however, that patronage is necessary for scientific institutions to conduct experiments. We suggest this solution as one of many possible in this respect, bearing in mind the need for an exchange of experience coordination, etc.

■ Another permanent task of science is cooperation and promotion of the popularization of the experience of outstanding vocational teachers. In spite of the difficulties, we still have many excellent schools in Poland. They are not always able to popularize their achievements. To encourage them to popularize their attainments ought to be made the duty of all scientific institutions.

27

Vocational training in the German Democratic Republic

Vocational training has been constantly developed and extended to meet the needs of society

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After the liberation of the German people from fascism, the aim in 1945 was to overcome the legacy of Nazi rule and the aftermath of the war in education, as in other areas, to develop an anti-fascist, democratic school system and to eliminate existing skill shortages. The anti-fascist, democratic school reform of 1945/46 also resulted in the reopening or creation of many vocational schools, the introduction of many additional training options and the training and employment of tens of thousands of progressive workers as teachers.

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Corresponding Member of the Academy of Pedagogical Sciences of the GDR
Chairman of the Scientific Council for Vocational Pedagogics of the GDR

From these first beginnings until today, vocational training has been systematically perfected. These efforts have raised workers' skill levels considerably. In 1955 70 % of workers in the GDR's economy had not completed any kind of vocational training. By 1970 the proportion had dropped to 34 % and by 1988 to just 14 %. The proportion of skilled workers and master craftmen rose in the same period from 26 % to 55 % in 1970 and to 65 % today. The proportion of university and college graduates in the labour force increased from 4 % to 11 % in 1970 and to 21 % in 1988. This fundamental change in the qualification structure is one of the main causes of the constant growth of 4 to 5 % per annum which has characterized the GDR's economy for many years.

These quantitative changes have been accompanied by qualitative improvements. Ten years compulsory education was introduced in 1959. Today 85 % of the pupils beginning a course of vocational training have certificates to show that they have successfully completed 10 years of general, polytechnical education at a secondary school. Polytechnical teaching was introduced in 1958. The subjects concerned (tending the school garden and handicrafts in the lower classes, introduction to socialist production, technical drawing and productive work from the seventh year) and the whole polytechnical nature of the secondary school provide a sound basis for subsequent vocational training.

The qualitative changes also include the forward-looking determination of the content of vocational training and the introduction of new, modern syllabuses in the various development sections.

The considerable interest taken in vocational training is partly due to the high regard in which skilled workers are held by society in the GDR. A skilled worker's occupation is the typical basic qualification of the ruling classes — the working class and the cooperative farmers. It epitomizes a high level of training which the majority of children and young people aspire to for their later lives.

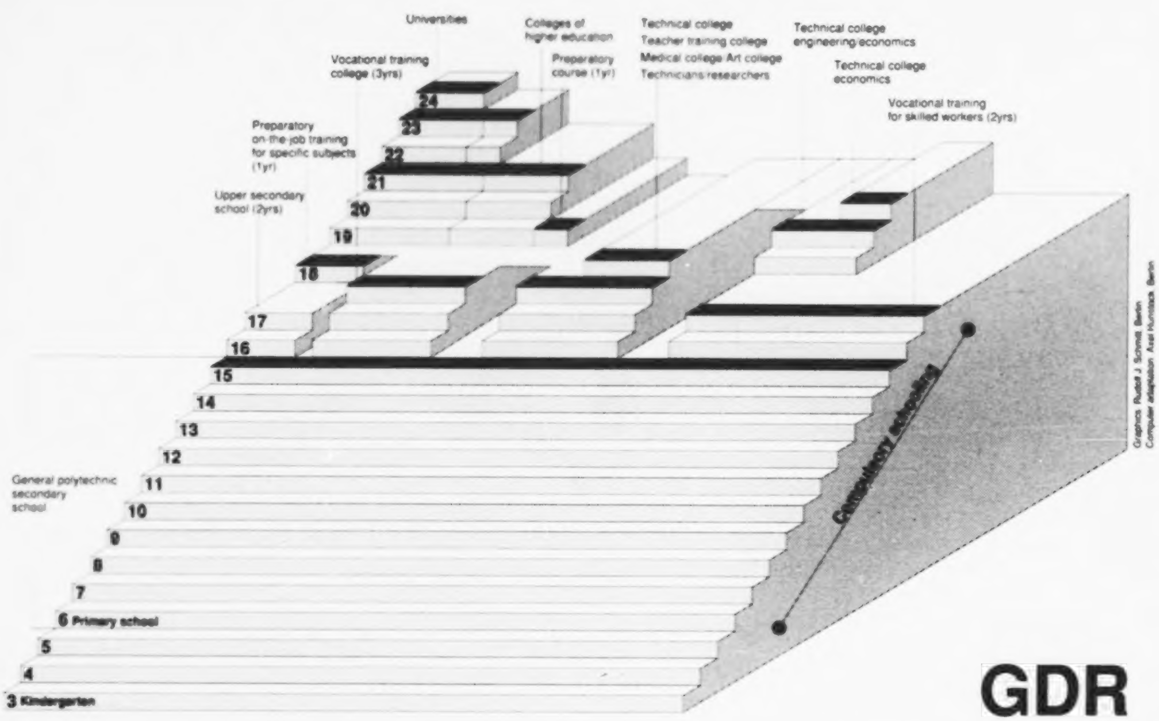
As part of the uniform socialist education system, vocational training guarantees equality of opportunity for all children and young people.

The Education Act of 25 February 1965 established an education system in the GDR whose component parts (nursery, secondary school, preparation for university, vocational training, college, university, adult education) are closely interlinked. It is geared to a uniform goal — the education and training of socialist individuals who are developed in every respect.

All sections of the education system agree on the content of education and training so as to ensure smooth transition between the various stages of education and the continuous development of the personalities of children and young people.

Striking features of the education system are equality of opportunity and the interchangeability of the elements of the education programme. None of these elements lead students to a 'dead end': subsequent levels of education are open to all young people regardless of their social origins, ideology and sex.

Some 85 % of young people leaving general polytechnical secondary schools choose to train to become skilled workers. For many years any school-leaver not attending an educational institution at a higher level (enlarged


Universities
Colleges of higher education
Technical college
Teacher training college
Medical college Art college
Technicians/researchers
Technical college engineering/economics
Vocational training college (3yrs)
Preparatory course (1yr)
Technical college economics
Vocational training for skilled workers (2yrs)
Preparatory on-the-job training for specific subjects (1yr)
Upper secondary school (2yrs)
General polytechnic secondary school
24
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10
9
8
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6 Primary school
5
4
3 Kindergarten
Compulsory schooling
GDR

Graphics Rudolf J. Schmitt Berlin
Computer adaptation Axel Hunstock Berlin

The vocational training system in the German Democratic Republic.

secondary school, college) has been assured of a training place. The GDR's Constitution states that every young person has the right and the duty to learn a trade (section 25(4)). This constitutional principle is oberserved in practice.

For their vocational training, graduates of the tenth class have a choice of 238 skilled worker occupations, 98 of which are basic occupations with 392 specialized fields, and 47 are artisan occupations. For those leaving the eighth year there are a further 62 skilled worker occupations, the level of requirements corresponding to the level of general education attained by these young people at that stage. Early secondary school leavers are trained in certain aspects of skilled worker occupations. All physically and mentally handicapped children and young people are trained in special institutions to the highest possible level permitted by the nature and degree of their disability, most to skilled worker level.

In principle, there is freedom of occupational choice in the GDR. Every skilled worker occupation is open to every young person provided that he or she meets the requirements and shows physical and intellectual aptitude for the field in question. Training places are provided to meet the real demand for workers in the various occupations as revealed by long-term forecasts. This is in the interests of the young people themselves, since training over and above actual requirements would make it difficult for them to find employment commensurate with their skills. There is no unemployment in the GDR. The GDR's Labour Code requires every enterprise providing training to offer trainees a contract of employment in the trade they have learned (section 140 (1)) six months before the end of their training. A well developed system of vocational guidance teaches young people to make a conscious occupational choice reflecting not only their personal inclinations, abilities and interests, but also the needs of society.

The content of vocational training is constantly adjusted to cater for new requirement resulting in particular from scientific and technological advance.

As in other countries, major changes are currently taking place in the GDR's economy as a result of the effects of the scientific and technological revolution. Their combination with the advantages of socialism is the most important aspect of our economic strategy. These advantages include the high level of education, an almost inexhaustible resource that is available to the GDR in sufficient quantities, unlike raw materials and sources of energy. Particular importance is therefore attached to the purposeful development and effective use of the skills of qualified workers for the broad application of modern or key technologies.

The forward-looking determination of the content of education is based on thorough analytical studies of the real, predictable trend in what will be expected of skilled workers as a group and in their various occupations. In recent years, particular attention has been paid to determining the implications of microelectronics, flexible automation, computer-assisted design and manufacturing (CAD/CAM), biotechnology, new materials and processes, the use of nuclear energy, laser technology and other technical and technological innovations.

On the basis of analyses of occupations, new syllabuses have been and are being drawn up for all skilled worker occupations. This work is being done by the specialized vocational commissions for each skilled worker occupation in which experienced vocational teachers cooperate with engineers, technologists, economists, specialists in industrial medicine, psychologists and other experts, trade union representatives also being involved. The introduction of new syllabuses began in 1986 and will be completed in 1990. In the 1988/89 training year, over 90 % of trainess are already being trained on the basis of new syllabuses, which now apply to 248 skilled worker occupations.

The syllabuses take account of the fact that there are considerable variations in the speed at which modern technologies are gaining ground in the various sectors of the economy, the enterprises and occupations so that old and new technologies will continue to exist side by side and will have to be productively used for a long time to come. The syllabuses therefore cover the modern and the traditional in equal measure.

A major objective is the occupational mobility of skilled workers. A balance is therefore struck between general education (about 15 %), basic vocational training (40 to 50 %) and special vocational training (35 to 45 %). General technical basic training is particularly important for mobility. Basic technical subjects (fundamentals of electronics, data-processing and automatic control engineering) were introduced as long ago as 1970.

In 1986 these three subjects were combined to form a new subject, 'fundamentals of automation', which also includes a course on the 'fundamentals of information technology'. For this purpose computer cabinets, each equipped with ten efficient micro-computers, have so far been installed at 700 vocational schools (about three quarters of the total). The computers are constantly modernized.

Learning and work are considered inseparable throughout the entire process of vocational training.

The basic principle of vocational training in the GDR is close association with work. Trainees learn their trade by acquiring know-how, abilities and skills on-the-job, i.e. they learn to work by learning as they work.

Vocational training is in principle provided on the basis of a training contract which the young person draws up with an enterprise. The training contract is a special form of the contract of employment. It means that the trainee is an employee from the outset, with all the rights and obligations that this entails. In terms of his social position, he is a worker, a member of the working class or the class of cooperative farmers, a co-owner of the means of production and a co-producer of the wealth of society.

Of the total training period (an average of two years), about a third is devoted to theoretical instruction and about two-thirds to practical instruction. This continues to be the case even under the most up-to-date production conditions, since sound basic skills are also needed for skilled work with the new technologies. Practical instruction is imparted at the training workshops of enterprises that provide training, in special departments of these enterprises or on building sites (training projects that require the guidance of a teacher), on trainers and simulators, in laboratories and in work collectives run by the enterprises. In every occupation, the last 40 to 70 days of training are set aside fot the course known as 'familiarization with future jobs'. This ensures that by the end of their training almost all trainees constantly attain the performance levels of a skilled worker.

A class in the vocational school 'M. Y. Kalinin' in Cottbus/GDR.

Schneider/ULLSTEIN

Practical instruction is almost entirely based on productive learning tasks, i.e. trainees are given tasks from the enterprise plan which form part of the enterprise's main line of production, the production of consumer goods, production for export or the manufacture of means of rationalizing production or represent direct public services. When productive learning tasks and jobs in production are selected for trainees, it must be ensured, however, thast the objectives set out in the syllabus can be achieved without limitation and satisfactorily in qualitative terms.

The growing demands made on skilled workers are increasingly resulting in the combination of initial and continuing training.

The quickening pace of change in products, work aids and technologies and the growing differentiation of work requirements in the same occupation indicate an objective need for the quantitative and qualitative growth of continuing training. At present 1.9 million workers (almost one in four) take part in continuing training schemes each year.

Most continuing training is organized by the enterprises which also meet all the costs involved. The worker himself suffers no loss in wages and does not have to pay for continuing training.

The law requires that whenever an economic measure (investment, rationalization, introduction of new products or technologies, structural changes, etc) is envisaged, its implications for continuing training must be indicated and the necessary action taken in good time. In principle, the measure must be discussed with the worker concerned, along the trade union, with a view to gaining his assent to the change. No worker need fear for his future prospects, let alone his job, in this connection.

As a rule, the skilled worker occupation learned by a worker during his vocational training remains his occupation for life. Continuing training — the acquisition of additional know-how or new skills, further certificates of qualification or competence or knowledge of another specialized aspect of his own or another occupation — largely takes place within this occupation.

Continuing training is compulsory for certain skilled workers, as a means of ensuring production safety and preventing damage and losses. It is provided mainly in the form of training designed to prevent accidents or training in working methods.

As a general rule, continuing training builds on the results of initial training and takes account of the worker's social and occupational experience. Conversely, initial training is designed with future continuing training in mind. Recently, growing use has also been made of identical programmes for initial and continuing training, especially in the case of new technologies. Initial and continuing training are increasingly becoming a single entity, consciously designed and structured as such.

The combines and enterprises bear much of the responsibility for providing vocational training.

A major advantage of vocational training in the GDR is that it forms a permanent part of the process of reproduction in the economy and enterprises. The first enterprise vocational schools emerged as the main type of training centre as early as 1948. These schools are state training institutions and also form part of enterprises. The establishment of state-owned enterprises had made it possible to entrust the enterprises with the implementation of national training policy. The amalgamation of theoretical and practical training in this new type of training institution marked the end of the dualism in vocational training dating back to capitalism. The close bond between training and production, an advantage of the dual system, was not only retained, but at last became fully effective.

Television tower and tower of the Marienkirche in Berlin (East).

Ritter/ULLSTEIN

Today there are 720 enterprise vocational schools and enterprise schools. The latter have departments, not only for theoretical and practical instruction, but also for the polytechnical instruction of trainees and the initial and continuing training of workers. In addition to these departments (a total of 550), there are 715 enterprise academies, which are separate institutions for the purposes of adult training. The theoretical instruction of the trainees of enterprises without a vocational school of their (own mainly small, medium-sized and craft enterprises) is provided by the 244 local vocational schools, which are the responsibility of the councils and districts.

The combines and enterprises play a direct part in determining the content of vocational training. Large industrial combines, for example, are responsible for the formation and guidance of specialized vocational commissions for more than 180 skilled worker occupations. As a complement to central continuing training programmes, the combines and enterprises devise a wide range of special programmes and equipment geared to their needs. The material and technical basis of vocational training is very largely created by the combines and enterprises. This is particularly true of the establishment and modernization of the training workshops, their equipment

Schmitt/STERN

with modern machines and facilities, the selection of suitable training places in production and the provision of tools and other materials needed for a high level of training.

The permanent integration of trainess into the enterprise collective and their active participation as members of the trade union esure that the working class has a say in the training of the next generation. A large part in this is played by the collectives, especially the youth brigades in which the trainees are trained, and the workers in these collectives who are responsible for the education and training of the trainees, the 100 000 or so skilled worker trainers.

Trainees' activities reflect the high level of democracy in vocational training in the GDR.

In the GDR's basic concept of vocational education and vocational training policy the trainee is an active partner of the teacher and has extensive rights and obligations. He himself bears much of the responsibility for ensuring that his training is successful. He mainly assumes this responsibility through his youth organization, the Free German Youth (FDJ), and his trade union. This democratic involvement is guaranteed from the central management of vocational training to each training workshop, each class and each collective of trainees.

The main method, which has proved its worth since 1949, is the Socialist vocational competition, organized by the FDJ and the trade unions, in which all trainees participate on the basis of their personal and collective obligations. In this context young people are oriented towards achieving good and very good results in theoretical and practical instruction, making an effective contribution to the fulfilment of the enterprise's plan and actively participating in the FDJ's economic initiatives, creative scientific and technological activities and the innovators' movement.

Since 1958, the 'Fair of Tomorrow's Master Craftsmen' (MMM) has been the tried and tested movement of the GDR's young people in the area of scientific and technological creativity, with trainees successfully solving problems encountered in the enterprise's science and technology plans and rationalization concepts, producing teaching aids or helping to improve heir training conditions.

The GDR's vocational training system involves qualified teachers, educators, cadres and specialists in vocational education.

As international experience shows, the presence and activities of qualified cadres is the key to the organization of high-class, effective vocational training. This being the case, the first steps were taken to train vocational school teachers in what is now the GDR as early as 1946 and systematically continued in the ensuing years to develop into an extensive network of university and college institutions for the initial and continuing training of vocational teachers by the mid-1950s.

In the GDR, teachers responsible for theoretical instruction (vocational school teachers) are trained in eleven subjects at five universities. From the outset, their studies are geared to their future activities as specialists in vocational education. The course lasts four and a half years and ends with the award of a diploma (in the teaching of engineering, economics or agronomy). During this period, students acquire a knowledge of Marxism-Leninism, the psychology of

Ritter/ULLSTEIN

Berlin Cathedral with the television tower.

vocational education and — depending on the subject they are reading — technology, economics or agronomy. Most of the 17 200 vocational school teachers have a diploma of this kind, as have most of the 4 000 full-time teachers in adult vocational education. They are joined by over 70 000 part-time teachers — engineers, technologists and other specialists.

Practical instruction is currently given by some 32 000 special teachers. They receive three years of training in 18 different subject areas at eight colleges.

The 1 340 trainees' hostels at present accomodate about one in three or some 120 000 trainees. The daily charge for board and lodging is only 1.10 Marks. The care of the trainees in the hostels is the responsibility of 6 300 wardens, who undergo three years of special pedagogical college training.

The development of the initial training system was accompanied by the establishment of an extensive continuing training system for all vocational training cadres, in which the cabinet for the continuing training of vocational training cadres in each district, plays a central role. At present, this continuing training focuses on the familiarization of teachers with key technologies, especially information technology.

Research on vocational education has always laid the scientific foundations for the structuring of vocational training.

Since the development of a Socialist vocational training system first began, it has also been considered very important in the GDR for the necessary scientific foundations to be laid. As early as 1950 the Central Institute for Vocational Training was established as the central research establishement in this field. This institute joins with the teachers and research staff who train specialists in vocational education at the universities in carrying out studies on basic and future aspects of the development of vocational training, in perfecting the theoretical basis of the study of vocational education and above all in compiling a wide range of practical guides for teachers, educators and cadres. These scientific foundations have made a major contribution to the successful development of vocational training in the GDR and guarantee continuous further development to meet the new, more stringent requirements to which social, scientific and technological progress is giving rise.

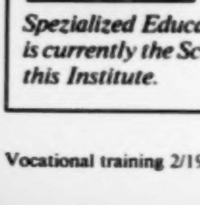
Vocational education in Czechoslovakia

Historical development

Although apprenticeship training was the responsibility of the guilds up until the mid-19th century, the State nevertheless intervened in this field during this period. The crafts patent of 1731 provided a uniform definition of the legal requirements of an apprenticeship. Following the introduction of six year's compulsory schooling, the State established the Sunday and 'refresher' schools for apprentices in 1774. The provisional trade regulations which dissolved the guilds in 1859 made it the responsibility of apprentice masters to ensure that every apprentice attended a school of further education.

Dr Václav Rohlíček

(born 1931) is the Director of the Research Institute for Vocational and Specialized Education in Prague. Since 1983 he has been chairman of a group of experts concerned with the development of specialized schools at intermediate level in the Socialist countries.



Dr Ivan Švanda, CSc

(born 1932) is a member of the scientific staff of the Research Institute for Vocational and Spezialized Education in Prague. He is currently the Scientific Secretary of this Institute.

The schools of further education were founded by a variety of associations and organizations. Their activities were nevertheless influenced by the State to a considerable extent: the State issued the directives for the establishment of the schools, drew up the curricula, and to an increasing extent covered the maintenance costs of these schools. The dual character of vocational training thus developed, the State education bodies assuming responsibility for the theoretical training of the apprentices with the employers implementing the practical part of training.

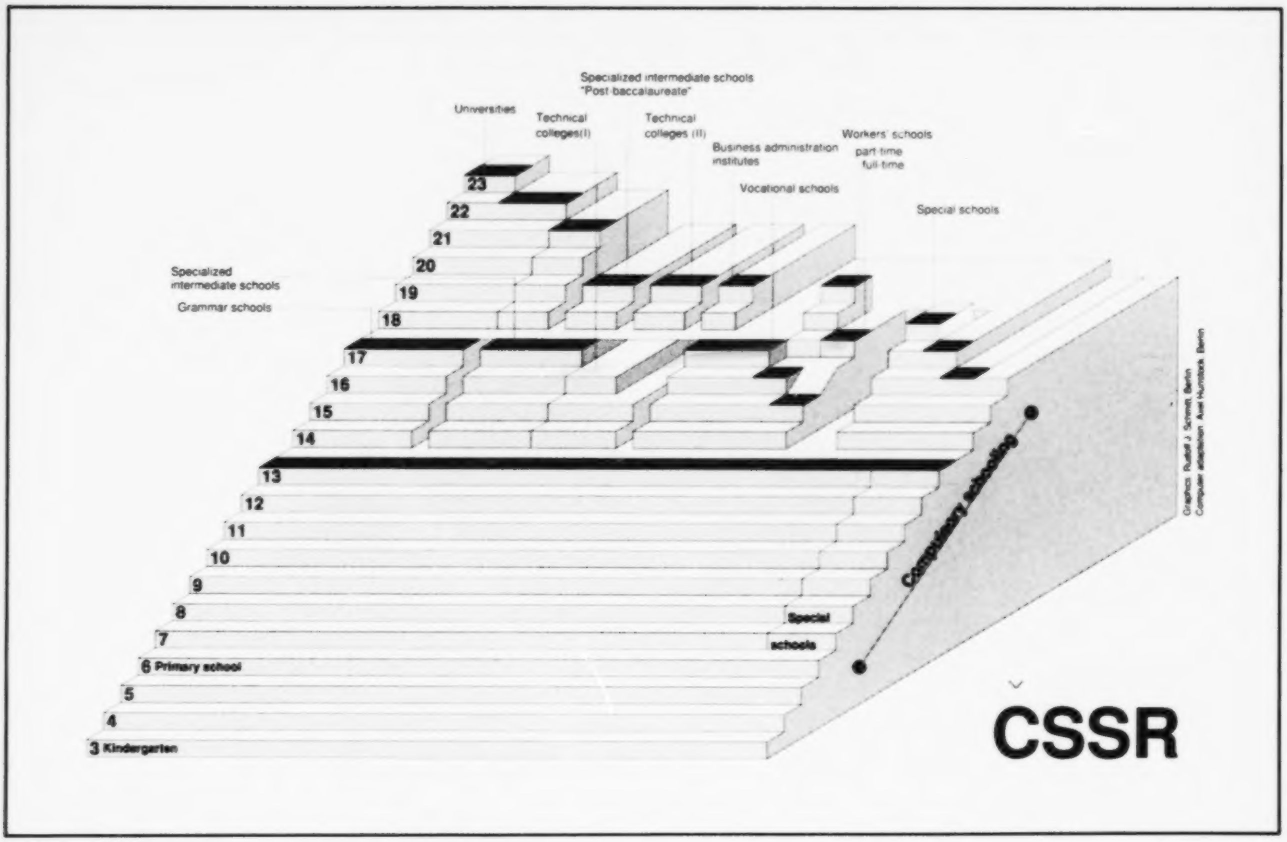
The nationalization of the majority of enterprises and the establishment of the agricultural cooperatives in Czechoslovakia in the years 1945-51 fundamentally changed this situation: these steps made the centralized steering of apprentice training for all sections of the economy possible. Centralized bodies responsible not only for the general education and theoretical vocational training of apprentices, but also their practical training and out-of-school apprentice education were created in the early 1950s. These institutions were named 'specialized apprentice centres' or vocational schools. This concept of apprentice education and training was constantly developed. The intermediate vocational schools which also imparted apprentices a general education over and above the specific needs of the training occupation were gradually integrated into the education and training system. In 1984 they were given the status of an intermediate school and since then they have been on an equal footing with the specialized intermediate and grammar schools.

Access to higher education was also opened up for intermediate vocational school-leavers; vocational training at the intermediate vocational schools became very school-like in character but the dual character of vactional training was nevertheless retained.

The structure of the education system

The Socialist Republic of Czechoslovakia is a Federal State comprised of two peoples. It has a total population of 15 573 000, two-thirds of whom live in the Czech Socialist Republic and one third in the Slovak Socialist Republik. An average of more than 220 000 children are born every year; these children are entitled to attend nursery schools once they have reached the age of 3; 93% of five-year-olds in fact do so. Compulsory schooling begins at the age of six and lasts 10 years. Upon completion of primary school, lasting eight years, students have to complete two introductory years at an intermediate school.

There are three types of intermediate school: vocational intermediate schools, specialized intermediate schools and grammar schools; all three types have equal social status. These intermediate schools on the one hand fulfil common tasks by giving students a general education and preparing them all-round for successful integration into social life; on the other hand, they fulfil specific tasks, characterized by the specific orientation of the type of intermediate school in question: the vocational intermediate schools in particular prepare students for workers' occupations, whereas the specialized intermediate schools prepare for middle-level employment in the technical, commercial, medical or other large-scale sectors of the economy — these two types of intermediate school are often referred to by the general term 'specialized school system'. The third


Specialized intermediate schools
"Post baccalaureate"
Universities
Technical colleges(I)
Technical colleges (II)
Business administration institutes
Workers' schools
part-time
full-time
Vocational schools
Special schools
Specialized intermediate schools
Grammar schools
23
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14
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9
8
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6 Primary school
5
4
3 Kindergarten
Special schools
Compulsory schooling
ČSSR

Graphics: Rudolf J. Schmitt, Berlin
Computer adaptation: Axel Humburg, Berlin

The vocational training system in Czechoslovakia.

type of intermediate school, the grammar school, prepares students above all for higher education. Upon completion of the eight year of primary school, approximately 60% of students switch to vocational intermediate schools, some 24% to specialized intermediate schools and roughly 16% to grammar schools.

The vocational intermediate school lasts two to four years, depending on the requirements of the occupation for which the students are preparing. The specialized intermediate schools and grammar schools last four years. Four years of schooling at any of the three intermediate school types leads to the baccalaureate. The students thus acquire a secondary school education giving them access to university entrance. In 1987/88, 52% of first-year students of higher education were grammar school-leavers, 20% specialized intermediate school-leavers and 11% vocational intermediate school-leavers (with four years of schooling at this level). These youngsters accounted for a total of approximately 15% of all 18-year-olds in Czechoslovakia.

The higher education sector is comprised of the universities and institutes of higher education for technology, agriculture, economics and the arts. Higher education lasts four to six years.

There are also special nursery schools, special primary schools and special intermediate schools for children and young people who for various reasons may require special care. At these institutions learning is adapted to the specific needs and potential of the youngsters.

Adult education is provided, on the one hand, by educational institutions and, on the other, by bodies sponsored by the various specialized economic departments and social organizations. In the case of the educational institutions, adult education either takes the form of training without any interruption of occupational activity in which the workers have the chance to acquire a vocational qualification they did not have an opportunity to obtain earlier in their careers, or in the form of a 'post-baccalaureate studies', geared towards intermediate school-leavers having passed the upper secondary school certificate. The 'post-baccalaureate' studies either serve to complete and complement previously acquired knowledge and skills or serve for the purposes of retraining. The specialized economic departments organize various types of specifically targeted courses and training schemes in which

Totals of educational establishments in Czechoslovakia, 1987/88

10 374	nursery schools with	659 592	children
6 268	primary schools with	2 062 990	pupils
348	grammar schools with	136 242	pupils
547	specialized intermediate schools with	214 956	pupils
940	vocational intermediate schools with	411 388	pupils
36	institutes of higher education with	135 136	students

workers acquire specific technical knowledge and skills they may require for their jobs.

Moreover, a total of 95 063 workers were in attendance at intermediate schools as well as going out to work (continuing training), 29 856 workers were studying in this form at the institutes of higher education.

Education at primary and intermediate schools and institutes of higher education is free and accessible under the same conditions to all the country's citizens. Textbooks, school materials and teaching aids are provided free of charge to primary and intermediate school students.

Skilled worker training

Since the adoption of the Education Act in 1984, attendance at a vocational intermediate school has been the only route leading to qualification for the job of a skilled worker or employee. These vocational schools train skilled workers, not only for industrial activities, but also for all other sectors of the national economy, including transport, trade, the services and agriculture. Concentration of vocational training in the vocational intermediate schools is made possible by the fact that in Czechoslovakia the structures of the economy, including agriculture, are exclusively comprised of State enterprises and cooperatives.

Training as a skilled worker/employee is offered in occupations uniformly stipulated by the Ministries of Education of both Republics for the entire national territory. The training courses are integrated into a system which is closely linked to the occupational system and the qualification and wage regulations governing skilled worker occupations. The vocational intermediate schools currently prepare students for activity in more than 90% of skilled worker occupations. The remaining occupations either require a specific form of training or do not call for a systematic form of training. Although some training courses prepare young people for a specific occupation, the majority prepare the students for a number of related occupations and activities.

Most skilled worker training courses are oriented towards students who have successfully completed the eighth year of primary school. These training courses last two, three or four years, depending on the qualifications demanded by the relevant occupation. In total, there are 49 two-year courses of training catering for 3% of vocational school students, 105 three-year courses where 81% of students are to be found (in 78 training occupations training is extended by four months) and 42 four-year training courses, opted for by 11% of students.

Two-year training courses with a reduced timetable and a modified curriculum are offered to students who have not successfully completed the eighth year of primary school. There are a total of 43 such training courses, attended by 5% of the students; they in particular make it possible for students to complete the 10 years of compulsory schooling.

Young people having successfully completed three years of training in one of 54 training occupations have the possibility of undergoing complete secondary education in parallel to their working activity (continuing education) in the framework of a two-year extension course.

Teaching at the vocational intermediate schools follows the curricula issued by the Ministries of Education of the two Republics for each occupation. The Ministries also approve the textbooks. The curricula of subjects of general education are drawn up by the Research Institute for Vocational and Specialized Education. Documentation on the contents of vocational subjects is compiled by the technical committees established at the level of the relevant specialized ministry; this material serves as a basis for the Research Institute for Vocational and Specialized Education to elaborate so-called 'leaver profiles' for individual training occupations, the curricula of the technical subjects and theoretical vocational training.

All the intermediate schools, including the vocational intermediate schools, impart both general academic and vocational education to their students. The curricula of the vocational intermediate schools therefore include both general academic subjects — for which between 26% and 41% of teaching time is reserved, depending on the course in question — and specialized/technical subjects. General academic subjects include Czech/Slovak language and literature, Russian, history, mathematics, physics, chemistry and physical and defence education. Teachers of these subjects have a diploma of higher education, valid for all types of intermediate schools.

Subjects of vocational theory include e.g. technical drawing, the basics of engineering, electrical engineering, materials technology, technology in general and economic and organizational science. The majority of the teachers of these subjects have a corresponding diploma of higher education, plus a certificate in teacher training. Of vocational education subjects, theoretical vocational education is the most important, accounting for 33/39% of teaching

Schmitt/STERN

Prague.

hours. In the initial phase, practical vocational training exclusively takes place in training workshops and similar facilities. In most training occupations the students are divided into groups. A group consists of seven to 12 students, guided by an industrial tutor who has a practical vocational qualification, a secondary school leaving certificate (baccalaureate) and an additional certificate in education. In the final phase, practical vocational training takes place in industry where the students are divided into minigroups (a maximum of three) and instructed by a carefully selected member of the industrial staff.

General education and theoretical vocational training alternate with practical vocational education in weekly or other blocks. Students are admitted to the vocational intermediate schools on the basis of their skills and interests, in conjunction with the needs of society. These needs are expressed by quotas stipulating the number of students to be admitted for the various training streams. These quotas are drawn up by the Ministries of Labour and Social Affairs of the two Republics, together with the State Planning Commission for a five-year period on the basis of the requirements notified by the various specialized ministries. The head (Director) of the vocational intermediate school decides on the admission of the student to the course, assisted by a selection board with advisory functions. Students are admitted to the four-year courses of training if they pass an entrance examination, the contents of which are stipulated for all types of intermediate school by the Ministries of Education on a uniform basis.

The two- and three-year courses end with a final examination before a board, whereas the four-year courses lead to the upper secondary school leaving certificate (baccalaureate). These comprehensive examinations in which the knowledge and vocational skills of the students are tested are taken before an examination board at the vocational intermediate schools where the students have received their training. The chairman of the examining board is appointed by the regional body of the State education authority; the other members are chosen by the head of the vocational intermediate school from the teaching staff at the vocational school. The final examination and baccalaureate certificates also testify the acquisition of a vocational qualification.

In the course of the final year of vocational education, the enterprises conclude contracts of employment with the students. All vocational intermediate school-leavers are certain of an occupation activity within the labour process.

Schmitt/STERN

Engineering works 'Tos Hostevar' near Prague.

Funding

The implementing bodies of the vocational intermediate schools — either organizations appointed by the corresponding economic ministries (usually large enterprises) or the National Committees at district level — are responsible for the provision of general and theoretical vocational education, practical vocational training, out-of-school education, the board and lodging of students at boarding schools, as well as funding and equipment for these institutions. National Committees set up and administer the vocational intermediate schools oriented towards small-scale enterprises (transport services).

In contrast, the costs of theoretical teaching, including the salaries of the teachers of theoretical subjects, are covered by the regional bodies of the State education authorities. (The teachers are employees of these regional bodies of the State authorities, whereas the directors, trainers and tutors of the boarding schools — which are an integral part of the intermediate vocational schools — and other staff are employees of the enterprises which established the vocational intermediate schools). The State bodies nevertheless also influence vocational education via the School Inspectorate and the so-called State supervision of vocational education in the context of which the Ministers for Education work in conjunction with the district National Committees.

The guidelines for the implementation of vocational training are issued by the Ministries of education of the two Republics; these bodies also lay down the nomenclature of the training occupations and determine the location of the vocational intermediate schools. In collaboration with the other interested circles, they issue uniform timetables and curricula for all the courses nationwide, approve the textbooks and teaching materials, stipulate the qualification requirements of the teaching staff of the intermediate vocational schools and issue the labour regulations applicable to the staff.

The Central School Inspectorate and the State Vocational Training Supervisory Board are also responsible to the Ministries of Education. These bodies are advised by central agencies for the coordination of vocational training comprised of representatives of all the interested circles, which devote their attention to fundamental issues pertaining to the development of the vocational training system.

Moldvay/STERN

Prague.

The specialized ministries set up technical working parties and react with their assistance to changes in the division of labour and the character and content of work; they submit proposals on changes to the organization and contents of vocational training.

The regional implementing bodies of the state education authorities are the National Committees at district level. These committees are responsible for the technical management of the intermediate vocational schools and cover the costs of theoretical teaching in the intermediate vocational schools, including teachers' salaries; they have monitoring functions, implementing the School Inspectorate and the State Vocational Training Supervisory Board.

The research 'workshop' concerned with questions of vocational training at vocational intermediate and specialized schools is the Research Institute for Vocational and Specialized Education. This institute draws up and submits drafts on education and training concepts in specialized education and presents proposals on timetables and curricula to the Ministries of Education. It is also responsible for the compilation of the textbooks, the follow-up and evaluation of the results of the vocational education of vocational school students and the assessment of correspondence between the qualifications of those leaving the schools and actual on-the-job requirements.

Present developments and the current debate

A major long-term trend in the vocational training system is that it is becoming more school-like in structure, a process facilitated by the central management of vocational training and the related traditionally strong influence of State agencies on training in skilled worker occupations in all sectors of the economy. A major change in the concept of vocational training was introduced in the early 1980s. So-called training occupations were introduced, broadly-based in profile and designed to prepare students for activity in several related occupations. The 'specialized apprentice centres' (vocational schools) acquired the character of intermediate schools. The apprenticeship system was abolished and apprentices given students status. As far as training content is concerned, particular emphasis was laid on the theoretical angle of vocational training. The general education function of teaching at intermediate vocational schools was reinforced. Finally, efforts were even undertaken to harmonize substantially the vocational education of the students at all the types of intermediate school. However, as a result, the age of students entering the vocational intermediate schools dropped to 14. All these changes are now subject to criticism. A number of enterprises refer to the enormously wide range of vocational qualifications of vocational intermediate school-leavers and would welcome workers in a position to accomplish specific activities in the framework of concrete production programmes. They criticize the deficient manual skills of the leavers of these schools. They indirectly find fault with the relatively long periods devoted to general education at the vocational intermediate schools. Many vocational intermediate school teachers are critical of the standards of the curricula which, they believe, do not correspond to the learning capacity of the students. These contradictions probably stem from the lower age of intermediate vocational school students. The implementing bodies of these schools are not satisfied with the provision of funds and equipment with which they are expected to provide a broadly-based education for vocational school students. They argue in particular that they contribute to the fulfilment of compulsory schooling in the two initial years of vocational intermediate schooling, whereas the State authorities bear the total cost of the education of young people of compulsory school age for the other types of intermediate school. For this reason, the justification of the measures introduced to the education system at intermediate vocational schools is currently under revision and a number of corrective measures have been applied. However a fundamental change in the present concept of vocational training at intermediate vocational schools is not to be expected.

New technologies, qualifications and vocational training in Hungary

Hungary has been faced with economic crisis since the end of the 1980s: its economic debt has doubled since 1980 while its national economy has remained in stagnation, its restructuring, badly needed to meet the growing demands for competitiveness and flexibility, has failed to get off the ground and there has been a slump in technological development. To meet the challenges of this situation, the Hungarian Government has accelerated the process of economic reform (launched in 1968, but halted in the 1970s) with the aim of the establishment of a 'socialist market economy'; its measures include a curtailment of the State's role in the economy, a reduction of State subsidies to industry, scope for the forces of the market and competition, the legalization of enterprise shut-downs and unemployment, the promotion of entrepreneurship, including the private sector, and companies based on foreign capital. In this context, human resources — the only outstanding resources in a country poor in materials, energy resources and with an obselete technological infrastructure — are destined to play a key role. This fact underlines the importance of qualified manpower and education as well as vocational training as a means of providing the economy with such manpower. Hungary's national economy is only modestly advanced in technology and lags behind the industrialized market economies — a phenomenon which, because of shrinking investment funds and their inefficient utilization, has unfortunately increased in the 1980s. Technological progress — the introduction of high technology — has mainly been concentrated on industry and agriculture; certain activities (such as banking, retail trade, the health service) have so far remained unaffected. In 1987, there were 64 983 computers (including 62 893 microcomputers) in the whole of the economy; of a total active population of 4.6 million, only 23 716 worked in computer-related jobs. Only a dozen CAD/CAM systems were in use and the number of robots did not exceed 100. Electronic machines and equipment accounted for 18.5% (complete electronic systems only 0.9%) of the machines used in the national economy (gross values). The proportion of manual jobs still ran at 60% of all jobs (1984).

The relationship between technological progress and education, including vocational training, is to be considered in the following against this background.

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(1947), is Head of the Department for Education, Central Statistical Office, Budapest, Hungary.

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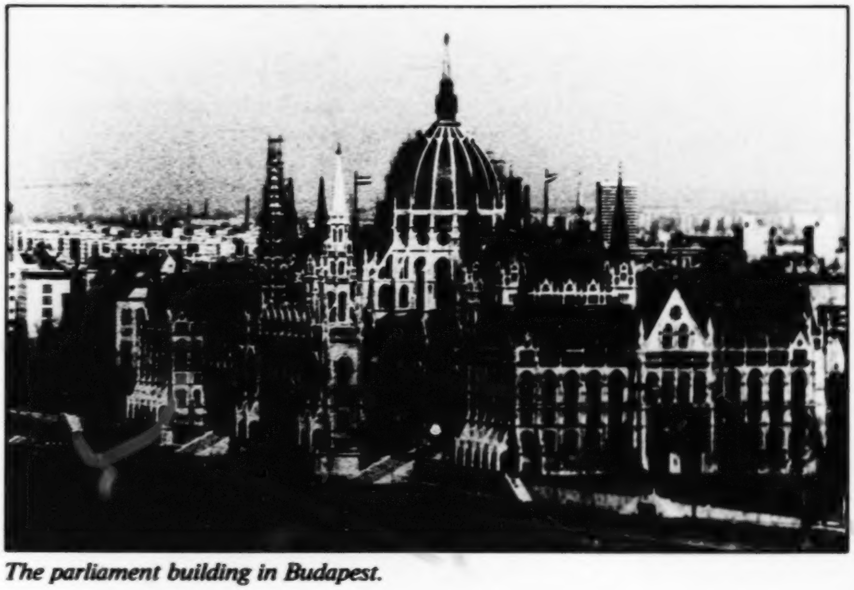
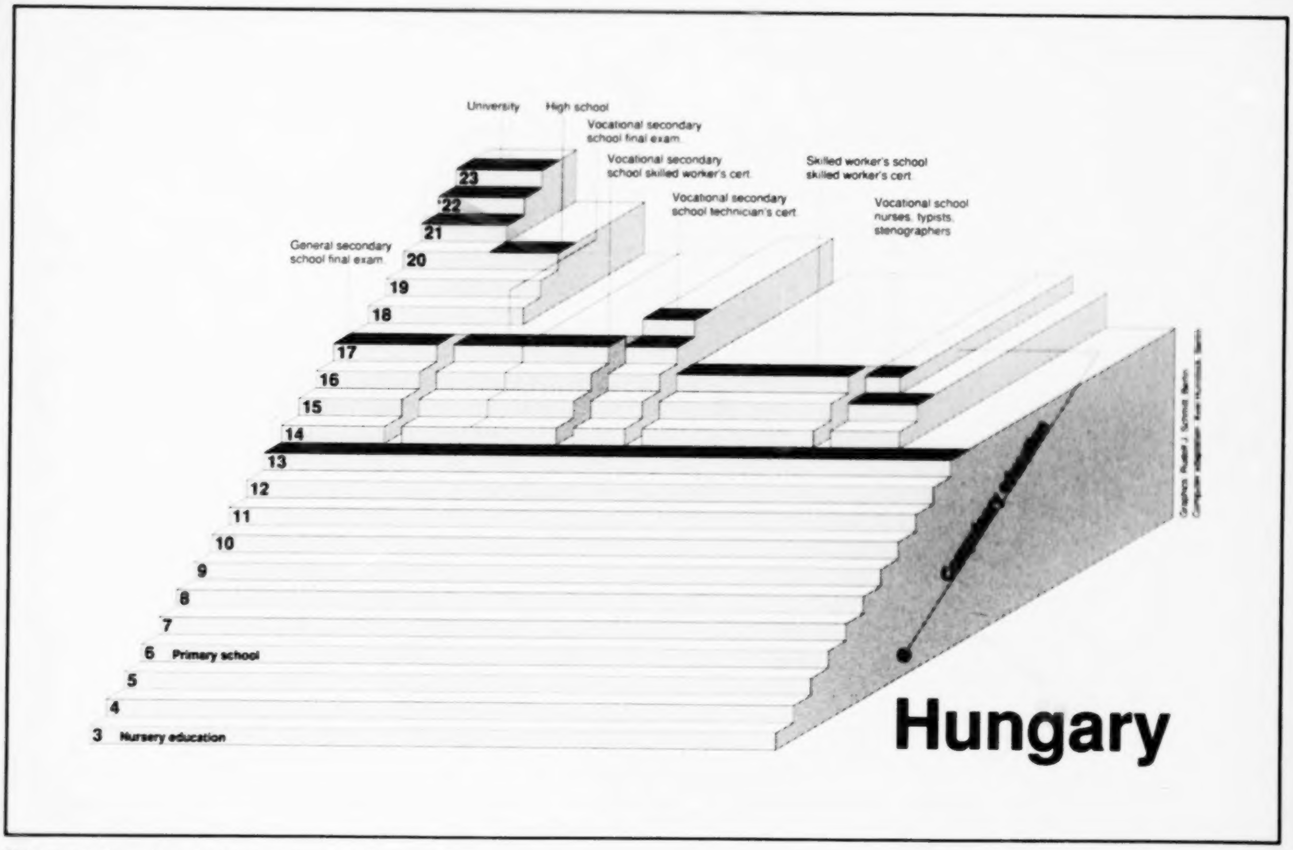


The parliament building in Budapest.

Ritter/ULLSTEIN


University
High school
Vocational secondary school final exam
Vocational secondary school skilled worker's cert.
Skilled worker's school skilled worker's cert.
Vocational secondary school technician's cert.
Vocational school nurses, typists, stenographers
General secondary school final exam
23
22
21
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6 Primary school
5
4
3 Nursery education
Compulsory education
Hungary

The vocational training system in Hungary.

Vocational training: institutions and output

In the 1950s Hungary's vocational training system broke away from its pre-war traditions, dating back to the Austro-Hungarian monarchy. A new system was built up according to the model of the other planned economies: its major features include a high level of institutionalization, in particular concerning the initial training of young people, the determination to make vocational training (or at least its major streams) an integral part of the State school system and a considerable degree of centralization as well as a predominance of centralized regulations and centralized State agencies in the running of the system, its costs mainly being covered from the budget. This model sets strict limits for the influence of both the suppliers and users of qualified labour on decision-making in the field of vocational training, i. e. relating to training institutions, enterprises and other organizations. The question is: to what extent has this vocational training system reflected the given level of technology, has it impeded or — on the contrary — paved the way for technological advance?

The State school system

In the Hungarian State school system (see Figure 1), general compulsory education lasts until the age of 16. Following primary school (8 years), young people can choose between two major streams of further — secondary or intermediate level — education: *general secondary schools* and the institutions of secondary or intermediate level *vocational training.* In fact approximately 95% (1987) of young people go on to secondary or intermediate level after primary school: a minority of them (about 21% in 1987) in general secondary schools and the majority (about 74%) at the various institutions of secondary-level vocational training.

In the State school system, secondary or intermediate-level vocational training is based on three major distinct institutions:

(a) ***vocational secondary schools*** (4 or 5 years);
(b) ***skilled workers' schools*** (3 years);
(c) ***vocational schools*** (2 or 3 years).

The most popular, and indeed most controversial, are the **vocational secondary schools** which have undergone several 'reforms' — most recently after 1985 — since their establishment in 1961. These schools assume a series of complementary (often contradictory) functions: they impart a general academic education, specialized knowledge in certain skills and occupations, their students leaving with a skilled workers' certificate, the secondary school final examination[1] and recently (since 1985 in 5 years) with the technician's certificate. Vocational secondary schools cover training in a large number of skills and occupations (for all sectors of the national economy, including those in the material and non-material spheres[2] according to a wide variety of curricula (the most recent of which have been introduced since 1985). 41.6% (1986-1987) of students in intermediate-level vocational training attend vocational secondary schools.

Skilled workers' schools are the traditional and equally important institutions of secondary vocational training: they concentrate on providing specialized (theoretical and practical) knowledge for a large number of various skills (mostly

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[1] Footnotes appear grouped on p. 42.

Christoph/ULLSTEIN

The central market in Budapest.

the material sphere of the national economy): their students pass a skilled workers' certificate. 55.3% of students in intermediate-level vocational training attended skilled workers' schools in 1986-87.

Vocational schools are the least important among the institutions of intermediate-level vocational education and have traditionally had a separate status. In fact they are limited to the training of typists, stenographers and nurses for the health service. (A third type of vocational school caters for slow learners). The proportion of intermediate-level vocational education students at vocational schools is low (approximately 4%).

In secondary and intermediate-level education there are *day* (the general rule), *evening* and *correspondence* forms of education. The ratio of the former was 72% and of the latter two 28% among secondary school-leavers in 1985.

Access to the institutions of secondary or intermediate-level vocational training is also given to secondary school-leavers; in such cases the same qualifications can be acquired in a shorter training period: at vocational secondary schools it is 2 years (instead of 4) and in skilled workers' schools from 1 to 2 years (instead of 3 years). The ratio of secondary school graduates among skilled workers' school students was 3.6% in 1985. Vocational secondary schools offer special types of complementary training for secondary school-leavers,[3] in certain skills vocational secondary training is limited to secondary school graduates[4] or adults.[5] In the State school system in 1985, 40 133 young people passed the final examination of vocational secondary schools, 52 345 young people acquired the skilled worker's certificate and 3 368 were graduated from vocational schools, giving a total of 95 846.

Training courses

Over and above the State school system, training courses — providing both initial and further training and recently also retraining — are institutions of importance in the Hungarian vocational training system.

Training courses are organized by various organizations — primarily by enterprises and training centres, but very often by the institutions of the State school system and sometimes by central State agencies, local authorities or other bodies. These courses provide training for semi-skilled workers, prepare participants for the skilled worker's examination, foreman or assistant foreman positions, etc. They cover practically all the fields of the national economy and society: both the material and non-material spheres. These courses vary in length from only several hours (27.2% last less than 30 hours) to several hundred hours (21.6% last more than 150 hours) and are held partly outside and partly during official working hours. Participants in training courses are mostly adults: in 1986 57.8% belonged to the 30-49 age-bracket, 6.9% were above 50, while only 29.3% were younger than 29.

Training courses are either financed by the organizers or the participants or the costs are divided between the two (unlike vocational training in the State school system funded from the budget and — at least in principle — gratuitous).

In 1985, 126 063 persons obtained initial and a further 174 889 their further training[6] partly for manual and non-manual jobs in the framework of training courses.

Higher education

The institutions of higher level vocational training in the State school system are the high schools and universities.

High schools (generally 3 years of training), which provide both the material and non-material sphere of the economy with highly skilled manpower, are specialized according to their specific field (high schools of the engineering industry, the electrical industry, construction, agriculture, forestry, commerce and restaurants, gardening and commerce, foreign trade, finances and accounting, etc.). Universities (4-6 years of training) issue professionals with 'diplomas' (such as engineers, physicians, economists, lawyers, etc.). High schools and universities also have day, evening and correspondence courses.

After passing the final examination at a general or vocational secondary school,[7] young people (or adults) can enter high schools or universities — provided they pass the entrance examination and are within the limits of the administrative quotas set by the State. (The latter have been primarily responsible for the relatively low ratio of high school and university graduates in Hungary in recent decades.)

Vocational training: problems and dilemmas

Secondary (or intermediate-level) vocational training[8] both inside and outside the Hungarian State school system has been faced with mounting difficulties in the 1980s: the problems emerging at the level of vocational secondary schools and skilled workers' schools as well as in training courses have partly been identical, partly different in nature. They shall be discussed together in the following with reference to the specific training route as appropriate.

■ In the entire vocational secondary State school system, a controversial process of integration and specialization has taken place: from the 1950s to the mid-1970s the number of specialized occupations and skills fell from about 200 to 128; later further specialization in the vocational secondary schools and the introduction of specialized technicians' training led to the creation of new occupations and skills whose number currently exceeds 300. Skilled workers' schools offer qualifications in 164 skills, vocational secondary schools in 95 skills, without mentioning the other forms of skilled worker training. It is the general opinion that vocational secondary training is 'overspecialized', rather than providing its students with a 'general orientation' or 'convertible knowledge'. However criticism is also voiced in the opposite extreme, mainly by industrial organizations which consider (open or tacitly) that specialization is insufficient and reproach vocational secondary education for its failure to provide 'ready-made workers'. In any case, the present level of specialization is a factor which renders vocational secondary training rigid, costly and difficult to manage.

■ Vocational secondary training, it is generally believed, does not adapt flexibly and rapidly enough to the new demands of technological development and the changing economic structure. Microelectronics, computerization, biotechnology, information on modern materials and flexible manufacturing systems are all subjects which show a deficit at this level. The curricula of the vocational secondary schools date back to 1978/80 (with the exception of technician training, 1984); in skilled worker training they were elaborated in the 1970s. The structure of skills and knowledge taught in skilled workers' schools has remained virtually unchanged since 1971. Training materials were mainly drawn up in the 1970s and reflect the technological level and organizational principles of that time. Certain sources estimate that the contents of vocational training are lagging behind even the (moderately advanced) level of technology in Hungary by as much as a decade. At the same time, debates are going on as to whether vocational training should be aimed at the technology of the 'present' or the 'future' (i. e. western Europe's present technology). Despite the particularly marked backwardness of skilled workers' schools, the labour market still showed a surplus demand for young people from these establishments in 1985/86 (while the demand for those leaving other types of vocational school was in decline).

■ Vocational secondary training is not adequately supported by the general education system. A general criticism is that its institutions, especially skilled workers' schools, have to contend themselves with 'poor quality' primary school graduates; students entering skilled workers' schools very often do not even master the three Rs and remedial teaching of these low achievers can only be implemented at the expense of their special (theoretical and practical) training. Young people often enter skilled workers' schools because they have no other alternative — which is a decisive factor in the decline in status of the skilled worker — a phenomenon which contributes to the often poor quality of training and training personnel. The drop-out rate among students is very high: in the training period 1982-85 it stood at an average 24.3% (in textile industry skills 44.4%, in metallurgical skills 44.2%, but among electrical mechanics only 3.6% and motor vehicle mechanics 11.8%, reflecting the very different social status of the various skills).

■ Vocational secondary schools are a cross-breed between general secondary schools and skilled workers' schools in the State school system. Unlike the former, they offer vocational qualifications enabling their graduates to find a qualified job. At the same time, they offer transition to higher level vocational training (high schools and universities), unlike the skilled workers' schools which are a dead end in the education system. Their achievements in these two fields, as their critics often point out, appear controversial. Firstly, the level of general knowledge attainment (and the prestige of their final secondary school examination) very often lags behind that acquired at general secondary schools: their graduates are usually at a disadvantage faced with competition for places in high schools and universities; the most prestigious of higher level education institutions seem to prefer the graduates of general secondary schools. Secondly, the qualification they provide is often criticized: the specialized knowledge they impart does not exceed the level of skilled workers' schools and in many respects (practical training) is below that level. Some say: 'the economy can make a better use of skilled workers' school graduates'.

■ Financial, material and personnel conditions in vocational secondary training have always been unsatisfactory and have been constantly deteriorating. While in 1970-75 the institutions of intermediate-level education (including vocational secondary training) had a 32.6% share (and skilled worker training a 12.7% share) of total investments in education, these proportions fell to 12.1%/7.5% respectively in the period 1980-85. There is a shortage of classrooms; the number of emergency schoolrooms is high. The machines used in training workshops are mostly outdated, in poor condition and badly maintained. Textbooks are adequate: these institutions use 2 000 (!) textbooks for training purposes, the revision of which (because of financial limits) cannot be realized for 20 years. Skilled workers' schools seem to be relatively well supplied as far as their staff complement is concerned (at 96% level), but they show a shortage of personnel in certain key subjects and the quality of their staff is often criticized (there is a general shortage for example of EDP teachers as universities started training students in this field unwillingly and belatedly).

■ Vocational secondary training functions under an intricate system of State supervision. Since 1985, central State supervision has been divided between the Ministry of Education, the sectoral ministries and other central agencies (including the Ministry of Industry — the most important of those involved — the Ministry of Transport, the Ministry of Construction, the Ministry of Agriculture and Food Industry, the Ministry of Health, the Central Statistical Office, etc.). At the same time, the schools themselves are run by the local authorities (i. e. the local bodies of the State administration), with some rare exceptions when they belong to enterprises.[9]

Moldvay/STERN

Shoe factory in Szombathely/Hungary.

This structure of supervision in principle offers a good opportunity to confront (and work out compromises among) the often diverging and conflicting endeavours and interests of educational and economic policy, the requirements of technological development, structural changes, the labour market, employment, etc. In practice, however, the supervisory central State agencies often shirk from their responsibility and the enterprises (from the appropriate sector) are proving to be increasingly indifferent with respect to the provision of vocational training. Especially the latter seem to feel that it is excessively expensive for them (in a tight economic situation) and fail to meet their skilled manpower requirements. (Previously, up to 1981, vocational training was supervised by the Ministry of Labour).

■ The enterprises have made their major contribution to vocational training by maintaining training workshops: in 1986/87 85.6% of skilled workers' school students received their practical training in enterprises workshops (the corresponding ratio among vocational secondary school students was 44-50%). Enterprises cover the costs of machines, tools and materials including protective clothing, and moreover pay scholarships and social benefits. Since 1976 enterprises have been able to rely on budgetary subsidies from the Skilled Worker Training Fund. (This fund was created from obligatory contributions from the enterprises themselves, running at 0.2 — 0.33% of their wage bills). Subsidies however hardly eased the burden on the enterprises and were not able to help practical training for vocational secondary schools. Hence in the tight economic situation of the 1980s, enterprises have proved less willing to maintain training workshops. In fact they have often limited their costs in this field to the amount earned by the production of their trainees. In 1988, a new Vocational Training Fund was established by law to which enterprises have to contribute 1.5% of their wage bills (minus expenses actually spent on initial vocational training).

■ Training courses — providing initial and further training — appear to have the obvious function of complementing vocational training in the State school system and — to a certain degree — of compensating for its insufficiency and rigidity. Their output is three times that of the State school system. Training courses are highly specialized: in 1986 there were 397 training courses leading to manual and 385 training courses for non-manual occupations (of which the number of training courses in industry stood at 249/175 respectively). Most of them were run by the economic organizations (enterprises, cooperatives, etc. 28%) or by training centres[10] (28.2%). In most cases, costs were covered by the enterprises (58.8%), by the participants (25.9%) or divided between the two (11.7%).

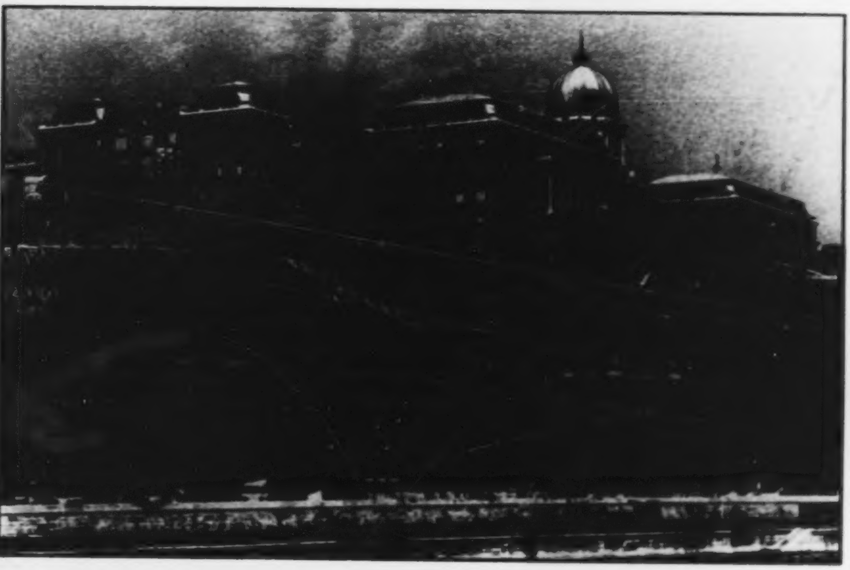
Most took place (at least partly) during working hours. These facts provide an example of the commitment of enterprises and other economic organizations to this form of vocational training, a commitment that appears to be stronger than in the case of vocational training in the State school system. The explanation lies in the fact that they mostly provide those specialized skills needed by the structure and technology of the economy.

■ As training courses are based on local initiatives (by industrial organizations, training centres etc.) and are loosely supervised by the central State agencies,[11] it is difficult to assess their quality:

■ they fill in certain definite gaps in the State school system (EDP for example has been taught mostly in training courses in recent years);

■ the value of the qualification provided varies according to the 'market' (e. g. the demand for EDP is high), the quality of training (certain training centres, have a good reputation, such as Szamalk in EDP) the status of the organizer (qualifications from training courses implemented by the Ministry of Finance are usually held in high esteem);

■ their charges are sometimes relatively moderate but often rather expensive , if they are self-financed or profit-oriented (if organized by training centres) they are very often better supplied with training facilities than vocational training in the



Bajzat/DPA

The Buda castle in Budapest.

school system financed from the budget. (Such generalizations should however be treated with caution because of the wide variety of very differing training courses).

- To ease tensions in employment, State-subsidized retraining schemes were launched in Hungary in 1983; these schemes have a double function: to prevent (or reduce) unemployment and to ease the shortage of labour.[12] In 1988, 14 425 employed workers, the majority women, participated in this programme; most of them were trained for semi-skilled jobs. Since 1988 this programme has covered the unemployed; in 1988 453 unemployed workers were retrained in 24 courses, mostly for jobs hit by labour shortage (waiters, salesmen, various industrial skills); unemployed secondary school-leavers mainly received retraining for jobs in the financial and health services. State subsidies for retraining courses are organized by the employers or local authorities. Employment-oriented retraining has been mainly concentrated on regions hit by unemployment. (Borsod-Abauj-Zemplén, Szabolcs-Szatmár counties). Retraining resources stem from the government's Employment Fund.

The gravity of these dilemmas is underlined by the prospects for the coming five years: the number of students, according to official estimates, will increase by 30% in vocational secondary training and there will be a similar growth in the number of those entering the labour market because of the population growth of the 1970s. Young people of school age are as follows:

Age	Number
17	146 594
16	145 202
15	148 013
14	152 172
13	178 821
12	187 192
11	179 466
10	172 437

Future prospects for vocational training

The output of the Hungarian vocational training system has slowly and gradually increased since the early 1970s. While the ratio of skilled workers among school-leavers has remained in stagnation (36.9% in 1971 and 37.7% in 1987), that of vocational secondary school-leavers has increased considerably (from 9.5% in 1971 to 17.9% in 1987). A certain degree of growth has also been observed in the ratio of university and high-school graduates (from 6.1% in 1971 to 10.3% in 1987). Despite this improvement, the Hungarian vocational training system has become the subject of repeated criticism. This criticism is centred on the following factors: its high level of institutionalization, its centralization and the predominance of central regulations and central agencies in its operation, its lack of properly effective and efficient training programmes and the low level of utilization of its resources — and last but not least — its intensivity towards the very needs of the national economy. A key issue in this context is the fact that vocational training fails to respond to technological progress, to the demands of present and future 'high technology'. While the debate continues, life itself has worked out certain remedies (the mushrooming of training courses) and certain changes (some of which have been mentioned above) have also been launched by the central agencies — to adopt the system to the present-day requirements, continuing a line of repeated corrections over the past 20-30 years. Proposals for a root-and-branch reform of the system have also emerged from the debate.

As far as the future development of the system is concerned, a certain degree of consensus appears to exist on the following:

- The essential tasks of vocational training are to be solved by the two existing institutions: the State school system and the training courses; their relationship however should be better coordinated and harmonized: to this end a clear definition of their functions and a clear-cut division of their tasks are necessary.
- The State school system is to abandon its ambitions to adjust itself to the current manpower requirements of the economy; instead it is to provide its students with solid and broadly-based, long-term knowledge, enabling them to enter certain qualified jobs directly, and — even more important — to undertake any further specialization (in training or retraining courses). Its graduates would not be 'ready-made workers', but people capable of adaptation.
- The State school system has to be improved in three respects: firstly, it has to give up its present 'over-specialization'; secondly, its quality is to be increased: vocational secondary schools (4 years) would become predominant. Traditional skilled workers' schools (3 years) would be maintained only for skills of primarily a manual nature. Thirdly, vocational secondary schools would give more emphasis to up-to-date knowledge (microelectronics, computer technics, biotechnics, etc.).
- Social groups, directly engaged in vocational training and in the utilization of its 'output', are to be given more say and influence in running the system; the autonomy of schools is to be increased; enterprises should be involved in the control (and financing) of not only skilled workers' practical training, but in the whole of vocational training; the autonomy of local councils in running the schools is also to be reinforced. In a nutshell: further decentralization is needed.

- Financing would become of 'mixed' nature: partly from the budget and partly from the enterprises (as indicated by the establishment of the Vocational Training Fund and the increase in training courses). The State agencies (the Ministry of Education, sectoral ministries) are to retain their role in supplying most of the personnel and material conditions for vocational training. State agencies and their institutions would continue to assist vocational training in the elaboration of training curricula and materials.

- The above approach to vocational training in the State school system appears to open up considerable scope for training courses outside this system, mainly based on company-based/(or other local) initiatives, oriented towards the 'market', hopefully with better defined assistance and supervision on the part of the State. Their importance is underlined by their tendency to take over 'specialized training' from the State school system.

Vocational training is dependent partly on the economic and partly on the educational system. In modern-day Hungary, there is a serious contradiction, in our opinion, between the State's efforts to promote reform in the national economy, to further economic restructuring and technological progress and to achieve an economic recovery on the one hand, and the State's policy *vis-à-vis* human resources (among others, education and training), crippled by the persistent dearth and gradual erosion of funds, on the other. In the process of the redistribution of national income, overshadowed by this contradiction, the State's human resources policy tends to be victimized: real wages have kept declining, social benefits have been eroded by inflation and the government tends to get rid of several of its traditional commitments in social and educational services. While the reform ideology of promoting 'market socialism' in itself represents a step forward from the traditional predominant role of the State in the economy and society — including education and vocational training — it often proves to be a pretext for cuts in the budget whether or not these are actually justified by the real needs of economic and social progress. In the final analysis, the danger is that even a more decentralized, market-oriented vocational training system may not lead to the expected results.

Moldwag/STERN

The bus production factory 'Ikarus' in Szekesfehervar.

Footnotes

[1] Roughly corresponds to 'A'-levels.

[2] The material sphere of the national economy includes industry, construction, agriculture and forestry, post and telecommunications, commerce, water supply while the non-material sphere covers the following activities: personal and economic services, health, social and cultural services and public (State) administration.

[3] Foreign trade correspondent, tourist guide.

[4] Gold- and silversmith, photographer, woodcarver, dental mechanic, beauty-specialist, windowdresser, optician.

[5] Bee-keeper, bookseller, shipman, boat-builder, driver, certain metallurgical skills (related with hard working conditions).

[6] Excluding management training and preparatory courses for State language examinations.

[7] An exception to this rule was the experimental direct transition of skilled workers to universities in the 1970s — an experiment that has largely proved disappointing.

[8] This paper — as its title indicates — is limited to vocational (or intermediate-level) secondary training.

[9] For example the Paks Atomic Energy Works.

[10] Training centres function under identical conditions to those of enterprises i. e. living from their income and profits from training courses without (in principle) budgetary subsidies.

[11] In 1988 the Government issued a decree aimed at the regulation of this form of vocational training.

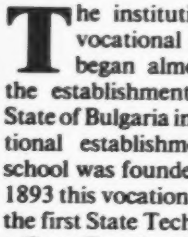
[12] The Hungarian economy is characterized by structural imbalances in employment: in 1988 it had somewhat more than 10 000 registered unemployed and about 60 000 vacant jobs.

Vocational training in Bulgaria

Some historical notes

The institutional development of vocational education in Bulgaria began almost immediately after the establishment of the independent State of Bulgaria in 1878. The first educational establishment as a vocational school was founded in Sofia in 1883. In 1893 this vocational school was declared the first State Technical School and later a 'State Practical Smith's School' with 3 years of vocational training. The second vocational school was founded in 1905 in the city of Gabrovo for the training of specialists in occupations related to leather processing and knife manufacture. The first technical secondary school was set up in Sofia in 1911 for the training of construction mechanics and land-surveyors.

The beginning of this century saw the foundation of the Naval Machine School and the special technical naval schools of the Bulgarian Naval Fleet in the city of Varna. A number of chambers of crafts and industry also established vocational technical schools of their own.



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This same period marked the emergence of private technical schools in a number of newly emerging professions. For example, the first electrical engineering school in Bulgaria was opened in 1908 and it was a private one. Special regulations were also drafted for the occupations learnt at educational establishments. Due to the limited needs of the national economy, however, the total number of educational establishments and their graduates remained limited. In the light of the country's intensive economic development during the last 45 years, a lively debate arose regarding the quality of the vocational training imparted to the population. Following a series of studies and experiments, it was concluded that each secondary educational establishment should impart to its students not only a broadly based general education, but also a certain degree of basic vocational education to facilitate their integration into working life, helping them cope more easily with the requirements of the new production technologies. This background should be borne in mind in the following discussion of the present-day structure of the Bulgarian education system.

The structure of the Bulgarian educational system

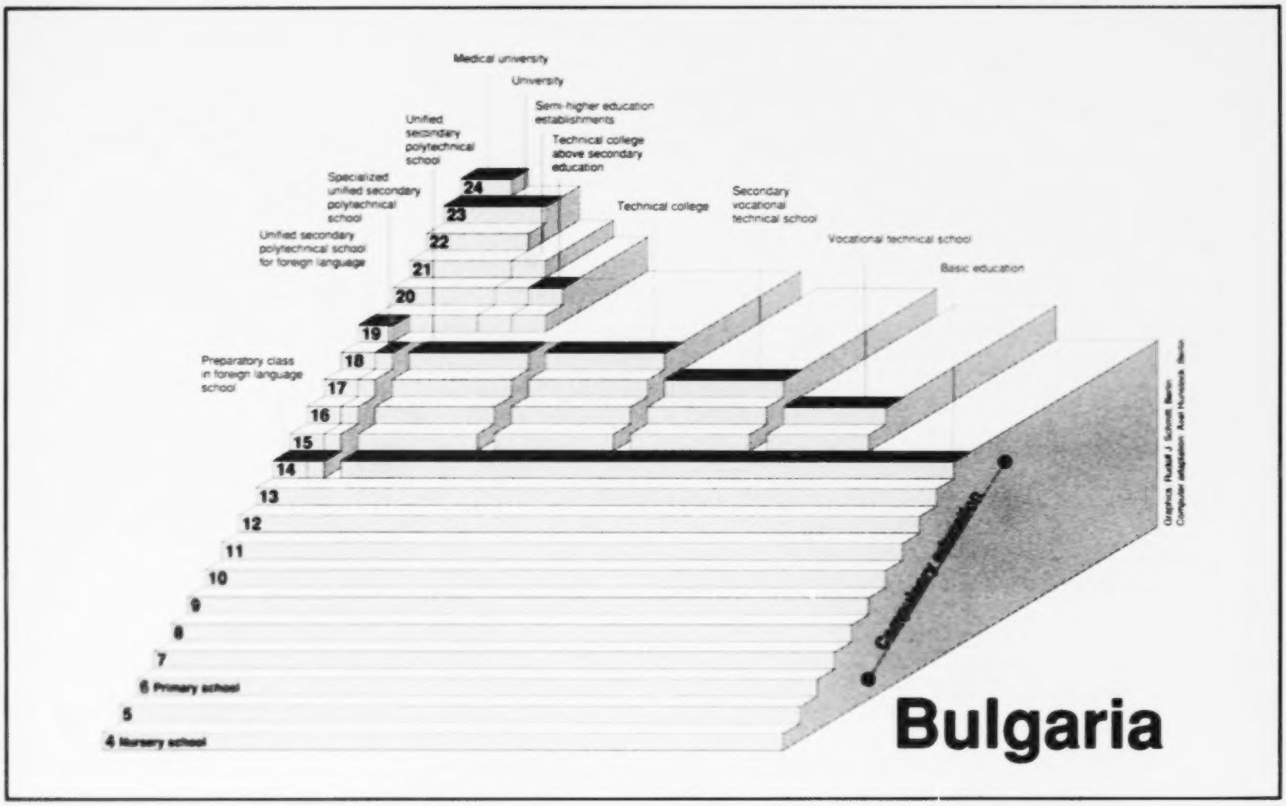
The **vertical structure** of the educational system comprises the following: pre-school education (ages 3-5), elementary education (1st-3rd class, ages 6-8), primary education (4th-8th class, ages 9-13), secondary education which can be general or specialized (9th-12th class, ages 14-17), higher/semi-higher education (2-3 years for semi-higher education and 4-6 years for higher education (18-23 years of age), the age limits differing for young men due to the two years of compulsory military service and post-graduate studies.

The **horizontal structure** of the educational system is first of all evident in the field of secondary education; this is of a dual nature expressed in the differentiation which exists in the educational process and hence in the types of educational establishment, divided into establishments of general education and establishments of vocational/technical education.

In the institutions of higher education, the horizontal structure comprises a whole diversity of specialities and major subjects of a basic or applied character. The horizontal structure of the secondary education system offers opportunities for training in the following types of establishment:

■ the **unified secondary polytechnical school** (USPS). This is the universal educational establishment providing general education. It is divided into two levels: primary (1st-8th class) including elementary and primary education and secondary, general secondary education (9th-12th class). After successful completion of the primary level, a student can decide whether he wishes to continue his education at the secondary level of the USPS or at one of the secondary educational establishments with a vocational technical leaning. The USPS secondary level is in itself also divided into three levels: level 1 (9th and 10th class), level 2 (11th and 12th class) and level 3 (one or two years of studies, depending on the occupation in question, providing certain vocational skills in the framework of the so-called 'Study-vocational complex', a form developed in the new educational system). Some schools offer a higher level of foreign language training, better qualifications in the field of natural sciences, or training in the arts. In almost all of these schools the secondary course begins after the 7th class of the USPS. Those who have completed the USPS can apply for entry to all the institutions of higher education. In 1989 about 57% of young people continued their studies in this type of school after completing their primary education.

■ the **vocational/technical school** with one to two years of training providing primary education and qualification as a skilled worker. The number of students enrolled in this stream shows a continuous downward trend. Only some 0.6% of those in the vocational training system attended such schools in 1988. About 9% of the students dropped out as


Medical university
University
Semi-higher education establishments
Technical college above secondary education
Unified secondary polytechnical school
Specialized unified secondary polytechnical school
Unified secondary polytechnical school for foreign language
Technical college
Secondary vocational technical school
Vocational technical school
Basic education
Preparatory class in foreign language school
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6 Primary school
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4 Nursery school
Compulsory education
Bulgaria
Graphics: Rudolf J. Schmitt, Berlin
Computer adaptation: Axel Hunsteck, Berlin

The vocational training system in Bulgaria.

a result of illness, low achievement, breach of discipline, etc. Those who complete the vocational/technical school are not entitled to apply for entry to institutions of higher education.

■ the **secondary vocational/technical school** with three years of studies provides young people with general vocational training and high-level qualifications for employment in the production field. The proportion of those studying industry-related subjects is the largest (91%). In 1988 about 28% of all young people attending Bulgarian secondary schools and about 48% of young people within the vocational training system were enrolled at the schools; the drop-out rate for this type of school was 5%. Completion of a secondary vocational/technical school entitles school-leavers to apply for entry to all institutions of higher education.

■ the **technical colleges and the arts schools,** which involve three to four years of regular studies and four to five years of linked work and training programmes (part-time studies), provide general vocational education and vocational training in a narrower specialized field. Upon completion of their studies, young people receive the status of a specialist having completed secondary education, a broad basis for the application of their abilities, and an opportunity to apply for entry to institutions of higher education. Under the conditions of the new education system, a new type of technical college has been established, offering two years training. Enrolment is possible following completion of secondary education. A functional integration is now being implemented between this type of school and institutions of higher education of the same character. In 1988 such educational establishments were attended by approximately 30% of secondary students and some 52% of those in the vocational training system. The proportion of those studying engineering and technical subjects was the largest (about 75%), followed by those studying economic subjects (about 11%). In 1988 the drop-out rate amongst technical college students was approximately 6%.

The horizontal structure of the institutions of higher education comprises the following subject clusters or groups of disciplines: engineering/technical disciplines; agriculture and forestry; economics; mathematics, natural sciences and humanities; medicine; art subjects. Higher education lasts 4-6 years: Following graduation young people may enter full employment as specialists with higher education studies or continue their education in various forms of postgraduate studies. 86 576 young people are currently undergoing training in the institutions of higher education, i.e. 96 persons out of every 10 000, or 5% of all young people aged 15 to 30.

Education and vocational training related to new production technologies

The demands on education and vocational training have soared as a result of the penetration into Bulgaria of new technical equipment and new production technologies. The fundamental issue at present is the quality of education and the quality of the vocational skills provided by the system of educational and vocational training. From this point of view the Bulgarian educational system has undergone significant changes. Its organizational structure (described in the previous part) has been changed. The changes relate to the content of the educational process are of no less importance. The basic aim of these changes is to create a closer link between the system of general and vocational education and the new production and social technologies implemented nationwide.

In the sphere of basic theoretical training, particular attention must be given to education in mathematics and the basic science subjects — physics, chemistry and biology. This education is oriented towards the student's understanding of the practical and applicable results achieved in different fields of science. Educational programmes which include new scientific areas are being extended to include for example mathematical analysis, mathematical modelling, geometrical transformation, bases of the fundamental physical theories, quantum mechanics, electrodynamics, chemical kinetics, scientific bases of the chemical, oil-processing and metallurgical industries, industrial biology, bacterial diseases, modelling of biological processes, etc.

Teaching in subjects and occupations related to new production technologies — for example robotic technician, mathematical programmer, optico-electronic equipment assembler, town systems administrator and subjects like industrial robot operation, ruling and sensor systems, industrial robot programming, robot modules for metal processing, biotechnologies, etc. — is widely imparted by the establishments of vocational/technical education.

One of the basic directions is computerization of the educational process itself. The main objective here is to bring about a fundamental change in the technical culture of young people, creating bases for their easy adaptation to new techniques and advanced technologies. In computer training, students are trained to work with computers, mastering the bases of programming, acquiring skills and aptitudes in communication with computers, becoming acquainted with the wide possibilities of this new technology in the fields of production and organization. The subject 'basic informatics' was introduced to the upper classes of the unified secondary polytechnical school as a response to the present need for the systematic acquisition of knowledge in this area.

Some substantial problem areas in education and vocational training

Several problem areas can be identified as far as the Bulgarian education system is concerned:

DPA

The Alexander Nevsky Cathedral in Sofia.

☐ Organization:

the basic problems here are related to the following phenomena:

- there are still a number of loopholes in the system for the control and registration of children and young people subject to compulsory education;

- failure to find the optimal means of achieving a balance between the manpower requirements of industry, the administration, institutions, etc. and the actual provision of personnel trained in the various occupations and specialized fields. Quite often a larger number of managers than necessary are trained for certain sectors while other sectors are characterized by deficits;

- the existing network of educational establishments and vocational training routes is quite complicated which creates additional difficulties when attempts are made to improve the system;

- the optimal correlation has still not been found between general and vocational education at the different levels of the education and vocational training systems;

- there are certain problems related to the establishment of an occupational nomenclature. Some occupational profiles are fairly broad, both with regard to the activities involved and the subject-matter and technologies required and used on the job; others are more narrow in scope;

- there is a shortage of teaching personnel in the field of new technologies.

☐ Vocational orientation and occupational choice:

- there is still a certain disparity between the occupational aspirations of young people and the occupations in which they actually receive training;

- there appear to be certain subjective errors made in the orientation of young people towards a given occupation; this is mainly due to the impact of the value system, the structure of occupational aspirations and the motives for exercising a given occupation;

- the quality of occupational choice is to a certain extent influenced by the insufficient or — in some cases — total lack of information on the specific requirements of an occupation and its concrete working environment;

- the research on the effectivity of the Inter-School Centres for Labour/Polytechnical Education shows that these Centres have not proved to be an important factor in occupational choice of profession.

☐ Vocational training:

- the level of vocational training acquired in the vocational streams of the unified secondary polytechnical schools does not always reach a standard guaranteeing a smooth transition to working life;

- there is some uncertainty about the qualifications of students trained in the educational and vocational training establishments with reference to their professional abilities which in a number of cases results in unwillingness to take up a job in the field of specialization in which training has been received, fluctuation during the first years of working life, readiness to go in for continuing training schemes, etc.;
- there appear to be certain imperfections in the evaluation methodology of the occupational skills of those leaving secondary educational establishments;
- another topical problem is the problem of standardization of general education in the unified secondary polytechnical schools, secondary vocational technical schools and technical schools;
- equal contents of general, vocational and special education in the unified secondary polytechnical and the secondary vocational/technical schools.

☐ Utilization of new technologies:

the basic problem in the field of training for work in the context of new technologies is the **difference between the level of the vocational training of young people and the specific working conditions** in the context of new technologies.

These two extremes often occur in reality when qualified specialists are trained to work with modern production technologies but begin working with old technologies (or cannot start working due to a shortage of jobs) and vice versa — training has been imparted under the conditions of obsolete technologies, but the workplace is equipped with modern technologies.

The basic factor related to the macroeconomic processes is the slower implementation of the achievements of scientific and technical progress at the level of the national economy. The main reasons for this phenomenon are as follows:

- the high level of capital investment with a low level of liquidity;
- the imbalance in the use of amortization funds which at present tend to be used more for accumulation than for reimbursement;
- State investment policy tends to grant priority to certain sectors of the economy;
- the prevalence of large-scale enterprises;
- although many young people are active in the fields of manual and non-mechanical labour, the proportion of persons occupied in such fields immediately before retirement is larger, thus creating risks in the light of the present rate of implementation of the technical achievements for an increase of the proportion of young people occupied in manual labour;
- another problem — often mentioned by research workers — in the concrete sphere of training in the context of new technologies is the insufficient time allocated for training in occupations related to new technologies. One example is that the two years of training envisaged for the specialized field of 'robot-building' are not sufficient to permit a complete mastery of this complicated specialized field;
- a further factor is also that as a result of the quality of teaching staff, vocational education sometimes remains abstract, out of touch with the reality of the working world. For this reason, students are not able to grasp completely the link between basic scientific knowledge presented to them in the theoretical part of education and concrete practice, i. e. to understand the scientific basis of the new production technology in the occupation in which they are being trained;
- certain problems also arise in courses in the sphere of preparing for work with computers and in concrete computer-based activity. The introduction of computers into the field of educational practice is still sometimes applied without a specific plan. The necessary preliminary preparation for a smooth completion of the process of computerization has not yet been accomplished. This refers to preliminary scientific, methodical preparation and the preparation of the personnel providing the conditions for a successful start-up and further consistent utilization of the new technology in the educational process;
- a further remaining problem is related to the subjective attitude of some young people — mainly those from the unified secondary polytechnical schools — towards the new occupations which are emerging as a result of the scientific and technological revolution, occupations involving the application of new production technologies. Young people are not keen to train for such occupations. Researchers explain that this phenomenon is due to the fact that these occupations require much more work, tension, effort, i. e. moral and intellectual qualities which are not inherent in certain groups of young people.

Weiler/ULLSTEIN

Sofia — Alexander Nevsky Square with the 'Memorial to the liberator of the country from Turkish occupation' and the People's Parliament; in the background — the Nevsky Cathedral.

By:

CEDEFOP

European Communities
International organization
Martina Ni Cheallaigh
Librarian
CEDEFOP

CEDEFOP's documentary information network was asked to provide material illustrating the theme of the Bulletin, and in particular to provide bibliographical references.

Anweiler, O. (Hrsg)
Staatliche Steuerung und Eigendynamik im Bildungs- und Erziehungswesen osteuropäischer Staaten und der DDR.
Berlin, Berlin Verlag Arno Spitz, 1986, 293 pp.
Osteuropaforschung Bd 21
ISBN 3-87061-308-4
Educational policy. Government. State education. Educational planning. Educational reform. Educational systems. Training systems. Training administration. Polytechnic education. Eastern Europe.

Proceedings of the 6th Internationale Fachtagung der Deutschen Gesellschaft für Osteuropakunde, 30. 9. to 3. 10. 1984, Vlotho/Weser. The contributions report on developments and basic problems in education in socialist countries. Questions are raised as to how State planning of education, pluralism in society, pedagogical autonomy in education and innovation work can interact in the Communist-run States of Eastern Europe. The papers include: the theory of autonomy in education and practical experiences in Poland; structures and problems of self-administration in schools in Yugoslavia; regional differences and educational planning in Hungary; educational reform in the USSR; educational administration research in the USSR, State intervention and economic interests in the administration of Soviet vocational training; cultural education in Poland; State and individual interests in education in German Democratic Republic; analysis of a pedagogical research programme in GDR, the problem of 'relative autonomy' in the general school systems in the USSR and GDR — the example of polytechnic education.

Baboukova, P.
Education that looks to the future: Bulgarian schools take on the challenge of the scientific and technological revolution.
World Federation of Teachers' Unions (FISE)
In: Teachers of the World (1) 1989, pp. II-IV
Languages: EN, DE, ES, FR
Educational development. Modernization. Educational innovations. Technological change. Science and technology. Curriculum development. Teachers unions. Bulgaria.

Government and teachers' unions in Bulgaria are in agreement on the importance of scientific and technological change in education. This article describes the challenges facing education and how these are being met, for example, by changes in curricula, continuing democratization of the education system, and teachers' new social function.

Charters, A. F.
Comparing adult education worldwide.
San Francisco, Jossey-Bass, 1981, XXI, 272 pp.
ISBN 0-87589-494-1
Comparative analysis. Case studies. Adult education. Continuing education. Legislation. Educational Systems. Educational technology. Asia. Eastern Europe. Western Europe. Training of trainers. Federal Republic of Germany. German Democratic Republic. Literacy. Developing countries. Educational institutions. Voluntary organizations. Educational research. Bibliographies.

International comparative study and case studies of adult education within the framework of continuing education — compares legislation, educational systems and educational technology in Asia, Eastern Europe and Western Europe with emphasis on training of trainers in Germany, Federal Republic and German Democratic Republic and literacy programmes in developing countries; discusses role of educational institutions, voluntary organizations, UN and specialized agencies; identifies priorities and common guidelines for educational research.

Extra-curricular and out-of-school education in European socialist countries.
Education extrascolaire et périscolaire dans les pays socialistes d'Europe. International Bureau of Education (IBE)
Geneva, Bulletin of the International Bureau of Education 62(248), 1988, 96 pp.
Languages: EN, FR
ISSN 0303-3899

Out-of-school education. Institutional framework. Social sciences. Natural sciences. Culture. Art. Mass media. Bibliographies. Socialist countries. Eastern Europe.

This bibliography is preceded by an introductory article describing the aims, structures, content and methods of extra-curricular and out-of-school education, a type of education which has a long tradition and importance as a means of socializing and developing the personality of schoolchildren and adolescents in Eastern Europe. The bibliographic material was supplied by Bulgaria, Czechoslovakia, Poland, Romania and the USSR. The titles represent a limited selection of existing literature but, nevertheless, they represent a cross-section characterizing the typical structures and content, as well as present trends in extra-curricular and out-of-school education in the given countries.

Katus, J.; Toth, J. eds.
On adult education and public information in Hungary and the Netherlands. Budapest, 1985, 171 pp., biblio.
ISBN 974-761-361-6

Adult Education. Social work. Local planning. Community development. Information. Culture. Public education. Government policy. Trade unions. Comparative analysis. The Netherlands. Hungary.

Papers presented at the Hungarian-Dutch symposium on adult education and public information, 1984.
Socio-cultural policies and the creation of scientific knowledge with regard to education and information of adults developed systematically in the Netherlands and Hungary after World War II. The role of the andragologist developed in both countries and showed mutual interest in each others' work. The papers look at various aspects of andragology which may be defined as 'work for social and cultural well-being (welfare work)', it includes 'social and cultural education of adults, including information, social support of adults in work situations, social and cultural support of adults engaged in community work and social assistance to adults'.

Potulicka, E.
Pologne: La radiotélé — université pédagogique
United Nations Educational, Scientific and Cultural Organization (Unesco)
In: Perspectives XVIII(2), 1988, Paris, pp. 213-221
Languages: FR, EN, ES
ISSN 0033-1538 (EN), 0304-3053 (ES), 0304-3045 (FR)

Distance study. Open university. Educational radio. Educational television. Teacher training. Further training. Teachers. Poland

This article describes the distance learning programme for teachers, Nauczycielsky Universytet Radiowo-Telewizyjny (NURT), which has been operated by the Pedagogical Institute (Instytut Ksztalewia Nauczycieli), Warsaw, since 1974. NURT provides theoretical and practical supplementary training for working teachers who completed their initial training in the usual way in universities or teacher training colleges.
NURT offers courses in three main areas: general culture, psychology of education, methodology of teaching various disciplines, leading to a final examination. The article describes and evaluates the pedagogical methods which make use of radio, television and programme support manuals; organization; participation by teachers and the level of competence and success they achieve.

Sukharev, A. Y.
The legal education of workers and managers in the USSR.
International Labour Organization (ILO)
In: International Labour Review 127(5) 1988, Geneva, pp. 613-626
Languages: EN, FR
ISSN 0020-7780 (EN), 0378-5599 (FR)

Workers' education. Legal sciences. Law. Managers. Workers. Workers' rights. Labour relations. Enterprises. Production. USSR

As Soviet society moves from the rigid structures of the past towards new forms of pluralism, increasing attention is being paid to the legal education of workers and managers to ensure that they play a more informed role in the radical changes taking place in the system of production and labour relations and assume fuller responsibility for the economic performance of their enterprises. Besides equipping workers to protect their rights, legal education aims at acquainting workers and managers with their new contractual possibilities and obligations and at enabling them to settle disputes more readily, to improve morale and discipline, and to prevent waste and damage. The author discusses the efforts being deployed and some of the results achieved. (extract)

Training systems in Eastern Europe; a study of change in the organization of training in the USSR, Poland and the German Democratic Republic.
Geneva, International Labour Organization (ILO), 1979, III, 149 pp.
ISBN 92-2-102017-7

Vocational training. USSR. German Democratic Republic. Poland. Institutional framework. Educational policy. Training centres. Youth. Vocational guidance. Further training. Educational opportunities. Women workers. Agricultural training. Research and development. Bibliographies.

Monograph on vocational education and vocational training systems in the USSR, German Democratic Republic and Poland — covers institutional framework, educational policy trends, vocational training centres for youth, vocational guidance, further training, educational opportunities (including those for the woman worker), agricultural training, research and development, etc. and includes abstracts of selected texts. Annotated bibliography pp. 107-149 and references.

Vyounkova, Y. N.; Rouvinski L. I.
L'école — laboratoire de formation précoce au métier d'enseignant en URSS.
United Nations Educational, Scientific and Cultural Organization (Unesco)
Paris, Perspectives XVIII(2) 1988, pp. 279-289
Languages: FR, EN, ES
ISSN 0033-1538 (EN), 0304-3053 (ES), 0304-3045 (FR)
Training workshops. Teacher training. Vocational guidance. Pre-vocational training. Models. USSR
The article describes the aims, objectives and pedagogical methods of a laboratory school set up, within a normal secondary school in Moscow, for the purpose of studying the question of guiding trainee-teachers towards the profession of teacher, as part of their training. The idea behind this method is that vocational guidance within a school setting is a process which prepares one to make a rational choice of profession, a choice which requires the assimilation of a certain knowledge of basic psychology and pedagogy inherent to the profession.

Management education and development in socialist countries:
Bulgaria, German Democratic Republic, Hungary, Romania, USSR
International Labour Office
Geneva, 1986 , 121 pp.
Management Training. Training programmes. Curriculum development. Socialist countries. Eastern Europe.
Project report on the management development systems in Bulgaria, German Democratic Republic, Hungary, Romania and the USSR — looks at international cooperation, training programmes, curriculum development, role of trade unions, etc.; lists training institutions. Bibliographies, diagrams, tables.

Completed educational research on Eastern Europe
Source: Eudised database (Council of Europe)
The use of distance study in technical and professional training and updating.
L'utilizzazione della formazione a distanza nella formazione e nell'aggiornamento tecnico e professionale.
Researchers: Baldassarri, M.; Carnillo, A. V.
Research Supervisor: Visalberghi, A.
Research Organization: Centro iniziativa e ricerca sul sistema educativo e scolastico (Cirses) (Centre for research and innovation in educative and scholastic systems), Via Brescia 29, I-00198 Roma
Language: EN
Distance study. Educational innovations. Technical education. Comparative analysis. Training programmes. In-service training. Public education. Educational needs. Eastern Europe.

On-going educational research on Eastern Europe
Source: Eudised Database (Council of Europe)
Quarterly journal documentation on educational systems in Eastern Europe.
Referatezeitschrift Ost-Dokumentation Bildungswesen.
Researchers: Bachmaier, P.; Weilguni W.
Research Organization: Österreichisches Ost- und Südosteuropa-Institut,
Josefsplatz 6, A-1010 Wien
Language: DE
Eastern Europe. Documentation. Educational policy
Pilot project for the development and testing of educational and vocational guidance programmes for German having emigrated from Eastern Europe.

Modellversuch zur Entwicklung und Erprobung eines Ausbildungsbezogenen Beratungsinstruments für Aussiedler
Researchers: Burghoff, U.; Heinen, U.
Research Supervisor: Hiesserich, H.
Research Organization: Otto-Benecke-Stiftung Geschäftsstelle Bonn,
Georgstraße 25-27, D-5300 Bonn
Language: DE
Sponsor: Bundesministerium für Jugend, Familie und Gesundheit, Kennedyallee 105-107, Postf. 200490, D-5300 Bonn 2
Educational guidance. Emigrants. Socially handicapped persons. Pilot projects. Aptitude test. School-leaving. Migrant integration. Eastern Europe.

Education in Romania—History, especially since 1877 (comparative education)
Researchers: MacGregor-Hastie, R. A. N.
Research Supervisor: Halsall, E.
Research Organization: Hull University, Hullm, HU6 7RX
Language: EN
Sponsor: Local Education Authority
Comparative education. History of education. Political philosophy. Romania. Eastern Europe

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Documentation on the educational policy in South-eastern Europe.
Dokumentation zur Bildungspolitik in Südosteuropa.
Researchers: Bachmaier, P.; Vogl, J.
Research Organization: Österreiches Ost- und Südosteuropa-Institut, Josefsplatz 6, A-1010 Wien
Language: DE
Educational policy. Documentation. Eastern Europe

L'enseignement de masse et effets sur la différenciation de l'enseignement secondaire. Etude comparée des modèles des pays de l'est et de la France.
Researchers: Revenko, T.; Navarro, M.
Research Supervisor: De Peretti, A.
Research Organizations: Institut National de Recherche Pédagogique 29 rue d'Ulm, F-75005 Paris; Ministère de l'Education Nationale, 110 rue Grenelle, F-75007 Paris
Language: FR
Comparative education. Secondary education. Eastern Europe. France. Mass education

B

By:

FOREM — L'Office communautaire et régional de la formation professionnelle et de l'emploi

VDAB — Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding

CIDOC — Centre intercommunautaire de documentation pour la formation professionnelle

ICODOC — Intercommunautair documentatiecentrum voor beroepsopleiding

Boulevard de l'Empereur 11, B-1000 Bruxelles, Tél. 02-513 93 20 — Ext. 1001

Introduction

With regard to cooperation between Belgium and countries in the Eastern bloc in the field of vocational training and education, a distinction should first of all be made between official framework agreements between two countries and existing or planned agreements between individual institutions or undertakings in Belgium and in these countries.

It should be clarified that the former type of cooperation is not confined to Eastern bloc countries. Belgium has cultural agreements with 47 countries, including Comecon States (except for Romania). Under the 'educational' part of these agreements, exchanges of experts, teachers and professors have in the past few years tended to be in the field of higher education. They take the form of bursaries for research and specialization in the field of science, the humanities and the arts, grants for holiday exchanges (language, literature and culture) and the exchange of teachers and highly qualified technicians, especially in the field of educational research, mainly with Eastern bloc countries such as Bulgaria, Hungary, Yugoslavia, Czechoslovakia and the USSR. For a more detailed analysis of cultural agreements with Eastern European countries, reference should be made to the following exchanges:

- Hungary: meeting of experts on the education of the handicapped, vocational education and vocational guidance facilities, organization and methods;
- Bulgaria: socio-cultural exchanges on the subject of adult education outside the school system, with the emphasis on women, the handicapped and those in need of remedial education.
- USSR: exchange of experts in technical and vocational education.

Implementing these agreements, a standing joint committee has been set up comprised of delegations from the Flemish and French communities (as well as the German-speaking community in matters concerning East Germany), representatives of the Kingdom of Belgium and a delegation from the other Eastern European countries. In reaching the agreements, the bodies responsible within their respective communities are the Ministries of the Flemish and French Communities and the Commissariats General for International Relations.

Mention should also be made of economic, industrial and scientific cooperation agreements. The Ministries of Foreign Affairs, Foreign Trade and Development Cooperation have been made aware that Eastern bloc countries are very interested in all the latest information on new technologies under these agreements, especially in view of the restructuring of the production system in Eastern European countries.

Finally, we come to individual forms of cooperation not covered by bilateral agreements between two countries.

Examples of such individual schemes are cooperation between the KUL/UCL and Polish universities, courses for Polish farmers set up by Boerenbond in Belgium, Russian proposals for cooperation on the training of engineers and management through the representative of the Soviet Chamber of Commerce and Industry in Belgium and Luxembourg and finally the work of Apefe, an association for the development of training and education outside Belgium.

Selective bibliography

Administratie voor Onderwijs en Permanente Vorming — Ministerie van de Vlaamse Gemeenschap
Jaarsverslag 1987
Brussels, Ministerie van de Vlaamse Gemeenschap, Diensten van de Secretaris-generaal, 1988, Palmerstonlaan 6-8, B-1040 Brussels.
Annual reports. Adult education. Continuing vocational Training. International Agreements. Culture. Continuing education. Eastern Europe. Belgium.

This annual report describes the work of the various departments of the Flemish Community Education and Continuing Training Authority. The short chapter on its section responsible for education and training contains information on international cooperation with countries — including Eastern bloc countries — in the field of education and science, through the exchange of teachers and experts, study bursaries and summer courses in Dutch language and culture for foreigners in Flanders.

The report provides a statistical overview of foreigners in Flanders and Flemings in other countries, covering the period from 1 July to 31 December 1987, whether or not the visits were arranged under cultural agreements linked with the cooperation described.

Diligentia Business Press Group
État des lieux des 50 premiers marchés de la Belgique: où en sont-ils? Qu'y faisons nous? Comment les aborder? Quels sont les risques, les perspectives? A qui s'adresser? ...
In: Belgian Business Magazine, le Mensuel du Décideur, 222, 1989, pp. 5-74 (also in Dutch). Diligentia Business Press Group, avenue du Houx 42, B-1170 Brussels.
International trade. Economic sectors. Imports. Exports. Eastern Europe. Belgium.

This issue of the business magazine is entirely devoted to the opening up of 50 new markets for Belgium in the run-up to 1992. One of the articles on new business markets is a special feature under the title of 'Eastern bloc: Gorby's magic wand' (pp. 22-29), reflecting the joint declaration of cultural and economic rapprochement between the European Community and the CMEA.

The Eastern bloc countries reviewed are the USSR, Yugoslavia, Hungary, East Germany, Poland and Czechoslovakia. The macroeconomic trends in each country are outlined, as well as more recent changes in the organization of enterprises and the production of goods and services that may be of interest to the private sector in Belgium.

The article identifies the public- or private-sector partners in Belgium who work in close economic, commercial and cultural contact with each of the countries listed.

Competent organizations and cooperation initiatives

A. Cooperation under bilateral agreements

■ Commissariat général aux relations internationales de la Communauté française de Belgique
Rue Stevens 7, B-1000 Brussels
Commissariaat-generaal voor de Internationale Samenwerking van de Vlaamse Gemeenschap (CGIS)
Trierstraat 100-104, B 1040 Brussels.

The Commissariats General for International Relations have the task of coordination, organization, logistics and support in the field of international cooperation. They implement the decisions reached by their respective executives.

■ Ministerie van de Vlaamse Gemeenschap, Administratie voor Onderwijs en Permanente Vorming, bestuur voor Onderwijs en Beroepsvorming
Mr P. Claus, Head of Administration
Belliardstraat 2 A, B-1040 Brussels.

Under international cooperation in the fields of education and vocational training, the Directorate of Education and Vocational Training handles grant applications, the exchange of teachers and experts, placements and summer courses, both for foreigners in Flanders and for Flemings abroad. In this respect, the department also deals with grants towards scientific research, mainly for missions by Flemings abroad.

■ Ministère des Affaires étrangères, du commerce extérieur et de la coopération au développement, Direction générale de la politique, Service scientifique
Madame S. Herpels, Head of Administration
Rue Bréderode 9, B-1000 Brussels.

The Minister for Foreign Trade negotiates and monitors economic, technical and industrial cooperation agreements between the Benelux and third countries, including the Eastern bloc States. These agreements have been supplemented by scientific cooperation negotiated and monitored by the Ministry of Foreign Affairs, Directorate-General for Policy, Scientific Department.

Scientific and technical cooperation between universities and enterprises under agreements takes the form of an exchange of information, visits by experts, seminars, placement exchange (technology transfer), the granting of licences, the possible setting up of joint ventures, etc. Courses can be regarded as on-the-job apprenticeship in enterprises and/or universities.

Each framework agreement envisages a joint committee which may set up sectoral groups. At each meeting, the parties evaluate the exchange and activities and agree on an action plan.

B. Cooperation among individual organizations

- Université Catholique de Louvain (UCL), Faculté des Sciences théologiques et canoniques
Professor Gilmont
Grand Place 45, B-1348 Louvain-la-Neuve

- Katholieke Universiteit Leuven (KUL), Justus Lipsiuscollege
Professor Desmet (for relations with Poland)
Minderbroedersstraat 15, B-3000 Leuven.

Since 1919 there has been a tradition of cooperation between the Catholic University of Louvain and Lublin University, whose founder was a student at Louvain. There is a current agreement between the universities under which they grant each other 24 monthly bursaries for doctorates, *agrégations* and publications by lecturers and professors. A similar agreement on 12 monthly bursaries has been reached with Warsaw and Wroclaw universities.

In addition to the cooperation with these three universities in the field of social science, there is an agreement between the Cracow Academy of Medicine and the KUL faculty of medicine relating to medical science. On the Polish side, the exchange is an opportunity for retraining or refresher training, for example in new technologies or the use of new medical equipment. On the Belgian side, the exchange not only promotes ongoing contact, but also enables participants to receive information and assistance extending far beyond a mere refresher course in Polish language or history.

- Belgische Boerenbond, Algemene Diensten
Mr W. Vandepitte, Deputy Secretary-General
Minderbroedersstraat 8, B-3000 Leuven

In 1987, in-company placements lasting four to six weeks were arranged to enable Polish students at the State Agricultural University to acquire experience in Belgian agriculture and horticulture. The main stumbling block is the language problem.

In 1989, Polish farmers are coming to learn about various aspects of Belgian agriculture. The particular aim of this study visit is to find out how organized agriculture works.

- USSR Chamber of Commerce and Industry in Belgium and Luxembourg
Mr V. N. Tarabara, Representative
rue Joseph II 3, B-1040 Brussels.

The aim of this public body is to promote business, economic, scientific and technical relations between the Soviet Union and other countries, seeking opportunities for cooperation with training bodies and institutions in Belgium for engineers, heads of undertakings and managers. The Chamber offers places at its own business school in Moscow and provides information on similar opportunities at the Ecole Supérieure de Commerce at the Ministry of Foreign Economic Affairs in Belgium, as well as the management school attached to the Institut d'Economie Nationale (Plekhanon).

- Association pour la promotion de l'éducation et de la formation à l'étranger (Apefe)
Mrs S. de Harlez, Principal
rue de Bréderode 9, B-1000 Brussels.

This association, founded in 1976, contributes towards the development of education and training outside Belgium. It is currently sending out more than 300 people throughout the world as educators and trainers, as well as for specific teaching assignments on agricultural, industrial and medical techniques.

D

bibb By:

BUNDESINSTITUT
FÜR BERUFSBILDUNG
Fehrbelliner Platz 3
D-1000 Berlin 31
Telefon (030) 8683-1

Anerkennung von Aussiedlerzeugnissen
Berufliche Bildung und berufliche Qualifikation in der Tschechoslowakischen Republik
Lorenz D.
Berlin & Bonn, 1980, 110 pages, ISBN: 3-88555-103-9
Training systems. Level of qualification. Training legislation. Refugees. Comparative analysis. Equivalence of certificates. Czechoslovakia.

The study gives a description and explanation of the legal regulations and foundations of the vocational training system in Czechoslovakia since the end of the Second World War. Extracts from a number of essential texts, above all the register of occupations subject to vocational training, can be found in German in the annexes. Its purpose is to provide the competent authorities in the Federal Republic of Germany with a technically and legally substantiated instrument to assess the equivalence of qualifications, diplomas and certificates acquired in Czechoslovakia. A revised edition of the study is to be published.

Anerkennung von Aussiedlerzeugnissen
Berufliche Bildung und berufliche Qualifikation in der Ungarischen Volksrepublik
Hegedüs, L.
Berlin & Bonn, 1980, 144 pages, ISBN: 3-88555-109-8
Training systems. Level of qualification. Training legislation. Refugees. Comparative analysis. Equivalence of certificates. Hungary.

As an aid for decisions on the recognition of certificates and qualifications acquired by ethnic Germans prior to their resettlement in the Federal Republic of Germany, this study provides an outline of the vocational training system in Hungary since the Second World War and compares educational routes and qualification standards in Hungary to those of the Federal Republic of Germany. The annex with a series of essential basic Hungarian legal texts in German is to serve to facilitate and improve decisions on equivalence. A revised edition of the study is to be published.

Anerkennung von Aussiedlerzeugnissen
Berufliche Bildung und berufliche Qualifikation in der Sowjetunion
Novikow, L.
Bundesinstitut für Berufsbildung (BiBB)
Berlin & Bonn, 1981, 87 pages, ISBN: 3-88555-112-8
Training systems. Level of qualification. Training legislation. Refugees. Comparative analysis. Equivalence of certificates. USSR.

The national study on the USSR is to provide the competent authorities with assistance in the recognition of diplomas and certificates acquired in this country since the Second World War. It therefore describes the structure and development of the vocational education system of the USSR, comparing Soviet training routes and qualification standards with those of the Federal Republic of Germany. This expert study on the USSR is of particular importance in that it offers a comparison of two completely different systems. A revised edition of the study is to be published.

Anerkennung von Aussiedlerzeugnissen
Berufliche Bildung und berufliche Qualifikation in der Deutschen Demokratischen Republik
Gewande, W.-D.
Bundesinstitut für Berufsbildung (BiBB)
Berlin & Bonn, 1984, 205 pages, ISBN: 3-88555-228-0
Training systems. Skill development. Refugees. Comparative analysis. Equivalence of certificates. Training legislation. German Democratic Republic.

This study gives a comprehensive survey of the development of educational paths in the German Democratic Republic, focusing on a description of the national training system. It also includes a comparison of the two levels of qualification — skilled worker and master — in industry and the craft trades. It is recommended to the authorities responsible for recognition in the Federal Republic of Germany that qualifications acquired in the German Democratic Republic be considered as equivalent to the corresponding qualifications in the Federal Republic of Germany with due consideration of the criteria of interpretation of the term 'equivalence', which are described in detail.

Anerkennung von Aussiedlerzeugnissen

Berufliche Bildung und berufliche Qualifikation in der Sozialistischen Republik Rumänien

Stratenwerth, W.

Bundesinstitut für Berufsbildung (BiBB)

Berlin & Bonn, 1985, 132 pages, ISBN: J-88555-225-6

Training systems. Skill development. Refugees. Comparative analysis. Equivalence of certificates. Training legislation. Romania.

The study on vocational training and qualifications in the Socialist Republic of Romania has now been revised in the framework of the special publications on the recognition of the vocational qualifications and certificates of ethnic Germans. This study provides information on the development of the Romanian education system, focusing on the periods of reform since the end of the Second World War. The nomenclatures or registers of the various occupations at skilled worker and master levels in industry and the craft trades who received their training at different types of school and enterprise and a glossary of the technical terms are of valuable assistance to institutions and authorities responsible for decisions on the recognition of qualifications and certificates.

Berufliche Bildung in der Volksrepublik Polen

Berufliche Bildung und berufliche Qualifikation in der Volksrepublik Polen. Entwicklung 1970 bis 1985

Göring, H.; Novacki, T.

Bundesinstitut für Berufsbildung (BiBB)

Berlin: BiBB, 1986, 84 pages, ISBN: 3-88555-306-6

Training systems. Training policy. Skill development. Refugees. Equivalence of certificates. Poland. Federal Republic of Germany.

This study follows on from the special publication. *Anerkennung von Aussiedlerzeugnissen — Berufliche Bildung und berufliche Qualifikation in der Volksrepublik Polen* (Recognition of the vocational qualifications of ethnic Germans — vocational training and vocational qualifications in Poland) which concluded with the wide-ranging plans for reform in the 1970s. This study now examines the fate of this reform. Once again the key question examined is whether and, if so, which of the changes implemented in the course of the development in Poland influence the assessment and recognition of vocational school qualification and certificates acquired there.

Technischer Wandel und Facharbeiterausbildung in der DDR und der Bundesrepublik Deutschland am Beispiel der Werkzeugmaschinenberufe

Buschhaus, D.

Wirtschaft und Berufserziehung (Bonn), 40 (3) 1988, pp. 72-77, ISSN: 0341-339 X

Analysis. Microcomputers. Machine tool operators. German Democratic Republic. Federal Republic of Germany.

The reform of machine tool occupations serves as an example to illustrate that the vocational training of skilled workers with respect to new technologies has reached a high level in both the German Democratic Republic and the Federal Republic of Germany. Substantial efforts are being undertaken in both countries to integrate numerical control technology into the training programmes for these occupations. Specialized training for work on CNC machine tools is being prepared by basic training in information and control technology.

Die Berufsausbildung in der Deutschen Demokratischen Republik

Bundesminister für Bildung und Wissenschaft (BMBW)

Informationen Bildung Wissenschaft (Bonn) (5) 1988, pp. 21-73, BMBW Referat Öffentlichkeitsarbeit, Postfach 200108, 5300 Bonn 2

Training systems. Training content. Skilled workers. Level of qualification. German Democratic Republic.

The vocational training system of the German Democratic Republic shows an impressive performance in terms of quantity. In the course of its history, it has succeeded in reducing the proportion of its unskilled and semi-skilled workers from 54% in 1947 to 15% in 1985. However this achievement has not been a complete success across the board. Since developments in technology and work organization have not kept up with the expansion of qualified skilled workers — German Democratic Republic theoreticians describe this phenomenon positively as the 'course function of education' — the overqualification of skilled workers often means that workers are often deployed at workplaces below their level of qualification or unrelated to the occupation in which they received training.

Die berufliche Bildung in der Sowjetunion

Steinbüchel, P.

Die berufsbildende Schule (Wolfenbüttel) 41, 1989, 1, p. 27-42. ISSN: 0005-951 X

Training systems. Basic training. Training policy. In-plant training. Vocational schools. USSR.

At the beginning of July of last year the Panunion Conference of the Communist Party of the USSR opted for the continuation of Gorbachev's policy of *perestroika.* Before his term of office as Secretary-General of the Communist Party of the USSR (1985), Gorbachev was a member of a working party concerned with the reform of general education and vocational schools. This study, based on experience gained in this field, attempts to show the fate of the reform of the Soviet education system and the importance of polytechnical education in the USSR today.

Bildung und sozio-ökonomische Modernisierung in ausgewählten sozialistischen Staaten
7. internationale Fachtagung vom 11. bis 14. Oktober 1987 in Vlotho-Weser. Veranstaltet von der Arbeitsstelle für vergleichende Bildungsforschung der Ruhr-Universität Bochum und der Deutschen Gesellschaft für Pädagogik.
Vlotho: unpublished, 1987, different page numbering
Gesamteuropäisches Studienwerk, Südfeldstr. 2-4, 4973 Vlotho/Weser
Education and training. Conference reports. Social change. Technological change. International relations. Eastern Europe.
The following papers, among others, were presented at this conference:

(i) Socio-economic modernization and educational reform in Hungary

(ii) Recruitment and selection models for the young scientific generation in the Peoples' Republic of Poland

(iii) *Perestroika* and educational refom in the USSR.

GR

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Blandow, S. C. (aut.)/Iliadis N. (Translator)
To sistima tis polytechnikis ekpaidefsis sti Laiki Dimokratia tis Germanias
Ekpaidefsi kai epangelma 3, 1988
ISSN 1011-3622
Polytechnic education, training of trainers, Ministry of Education, Curriculum, Secondary education, Technology, Compulsory education, German Democratic Republic.

The article describes the system of polytechnic education in the German Democratic Republic (GDR). It makes reference to the scientific-technological reform of general education, which was initiated in 1982 and was implemented gradually until 1985. The purpose and special objectives of the technological reform are discussed followed by a presentation of the related curricula for all compulsory school grades. In turn, reference is made to the cooperation between the Ministry of Education and the other ministries and organizations aimed at a more effective implementation of the practical aspect of polytechnic education. Finally, the article discribes the training scheme of the teachers who undertake the teaching of the polytechnic subjects in secondary schools.

Petric, N.
I afomoiosi tou periechomenou ton anthropistikon scheseon metaxy ton fylon kai tis ypefthynis stasis ton goneon sto Yugoslaviko ekpaideftiko systima.
In Isotita kai ekpaidefsi, Athens, undated, pp. 111-129 (tables).
General Secretariat for Sex Equality, Mousaiou 2, GR-105 55 Athens.
(Paper given at a conference in Thessalonica, 2-5 May 1985, on 'Equality and education').
Educational systems. Parent-child relations. Sex roles. Women's status. Human rights. Yugoslavia.
Article on assimilation of the content of human relations between the sexes and parents' attitudes in the Yugoslav education system.

Titkow, A.
Ekpaidefsi: to aitio, to apotelesma i o rythmistikos paragontas ton anisotiton anamesa sta dyo fyla
In Isotita kai ekpaidefsi, Athens, undated, pp. 56-67.
General Secretariat for Sex Equality, Mousaiou 2, GR-105 55 Athens.
(Paper given at a conference in Thessalonica, 2-5 May 1985, on 'Equality and Education').
Educational systems. Sex roles. Women's status. Poland.
The subject of this paper is education as a factor promoting equality between the sexes. More specifically, education is presented as a factor reducing existing inequalities.

Misheva, P.
I isotita kai o anthropismos tis paideias sti Laiki Dimokratia tis Boulgarias
In Isotita kai ekpaidefsi, Athens, undated, pp. 162-269.
General Secretariat for Sex Equality, Mousaiou 2, GR-105 55 Athens.
(Paper given at a conference in Thessalonica, 2-5 May 1985, on 'Equality and Education').
Educational systems. Educational opportunities. Human rights. Human dignity. Equal opportunities. Women. Bulgaria.

Paper on equality and humanism in Bulgarian education. The general purpose of education is to create a well-balanced personality; upholding the equality of the sexes and protecting human rights and freedom are priorities.

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Garcia Garrido, J. L.
Sistemas educativos de hoy
Madrid: Editorial Dykinson, S.L. 1987, 706 pp.
Second edition.
ISBN: 84-86133-31-9
Educational systems. Educational policy. Educational financing. Primary education. Secondary education. Pre-school education. Teaching personnel. Educational facilities. Higher education. Technical education. Vocational training. Schools. Public Education. Private education. Teaching methods. Teacher training. Culture. Social structure. Political systems. Educational administration. United Kingdom. France. USSR. Spain. FR of Germany. North America.

This comprehensive study of six education systems (in Germany, Britain, the USSR, France, North America and Spain) gives an in-depth analysis of the context in which each of these systems has developed (natural, political, social and cultural factors), their origins and historical development and then goes on to focus on the present status of these systems. Attention is devoted to the current administrative and institutional structure of each system (levels of education). The chapters dealing with each system end with a review of present and future problems (democratization, society, teachers, centralization and decentralization, public and private education).

Acero Saez, E.; Aparicio Fernandez, J. M.
Realidades en las que meditar. Algunas notas de un viaje efectuado a la República Democrática Alemana.
In Profesiones y Empresas 1, 1989, pp. 58-61.
Ediciones Técnicas y Profesionales, S.A.
Gran Via 38, 9º 1. 28013 Madrid.
Educational systems. Educational levels. Primary education. Secondary education. State education. Technical education. Vocational training. Teachers. Student allowances. German Democratic Republic.

A view of the education system (other than at university level) of the German Democratic Republic, based on direct observation. The authors examine the level of participation of parents and students in school organization, the training and work of teachers; methods of pupil selection through the different levels of education, technical education and vocational training, student allowances and the importance accorded to education for the physically and mentally handicapped.

La enseñanza en Polonia.
In: Profesiones y Empresas No 6, 1987, pp. 29-32.
Ediciones Técnicas y Profesionales, SA,
Gran Via 38, 9º 1. 28013 Madrid
Educational systems. Teachers. Educational reform. Educational levels. Compulsory education. Student population. Primary education. Secondary education. Vocational training. Higher education. Teacher training. Technical education. Eastern Europe. Poland.

A description of the Polish education system, covering participation at the various levels: primary school, vocational schools, secondary schools (general, technical, academic, art schools and schools of agronomy), higher education, adult education. Also considered are educational innovations, the conditions of teachers and the situation of rural schools and out-of-school education.

Prunt, V.
Reforma educational soviética: segundo año.
In Profesiones y Empresas No 11, 1986, pp. 6-8.
Ediciones Técnicas y Profesionales, SA
Gran Via 38, 9º 1. 28013 Madrid.

Educational systems. Educational reform. Vocational training. Teachers. Curriculum. Compulsory education. State education. Eastern Europe.

This article covers various aspects of the reform of Soviet education: the lowering of the compulsory school age, craft training in production centres established for this purpose or at the workplace, new subjects in the curriculum and forecasts of increased teacher numbers, reflecting the new needs resulting from changes in the education system.

Avraamov, Y.
Qùe significa fábrica — centro de enseñanza superior técnica?
In Profesiones y Empresas No 2, 1986, pp. 28-18.
Ediciones Técnicas y Profesionales, SA
Gran Via 38, 9º 1. 28013 Madrid.

In-plant training. Higher education. Technical education. Alternating training. Specialist training. Training periods. Training centres. Engineers. Cost of education. Eastern Europe. USSR.

The article describes an institution in the Soviet higher education system which allows engineers to be trained at centres attached to factories (the 'fabrika/VTUZ' system), in particular systems of production. Having begun with a brief historical introduction, the article goes on to describe the institution in question, giving real examples and pointing out the benefits compared with other higher education systems. Such benefits are both financial (from the state's viewpoint) and social.

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New technologies, qualifications and vocational training in Eastern Europe

Bibliography and resource agencies

Apart from some international literature (ILO, Unesco, etc. publications and journals), there is little purely French literature to be found on changes in the vocational training systems in Eastern bloc countries.
A search of the documentation held by Centre Inffo and Ceducee (Centre d'etudes et de documentation sur l'URSS, la Chine et l'Europe de l'Est) has revealed only one title, which is already out of date.

Tanguy, Lucie; Kieffer, Annick
École et entreprise: l'expérience des deux Allemagne
Paris: La Documentation française, 1982, 172 pp.
Notes et études documentaires, No 4669-4670.
(ISSN 0029-4004)

Vocational training. Apprenticeship. Alternating training. School-enterprise relationship. Federal Republic of Germany. German Democratic Republic.

This report presents the technical and vocational education systems of the two Germanies, West and East, as examples of alternance training in the school and at the workplace as a contribution to the debate on alternance training.
Ceducee (Centre d'études et de

documentation sur l'URSS, la Chine et l'Europe de l'Est), established in 1967, is a resource agency concerned with the planned economy countries. It compiles and processes articles from the economic press of these countries and produces comprehensive dossiers from the best media articles and documents to be found in the West. Its field of research is mainly economics, but it also has items of information on employment and training. Ceducee publishes a monthly journal: Le Courrier des Pays de l'Est.
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Vocational training in Eastern Europe

Although Ireland has trade links with most Eastern European countries, very little research or vocational training activity has taken place in these areas to date. However, the Irish Government recently established the Overseas Consultancy Group, a task force to examine the potential for overseas consultancy work. A number of State-sponsored bodies have formed subsidiaries with specific responsibility for the marketing of overseas services. The Irish Labour Training Services (ILTS) was one such company. Its aim is to market abroad the expertise and services of FaS, the national Training and Employment Authority.

ILTS was recently awarded a prestigious training project in the Republic of Turkey, as part of a consortium with British and American interests. Organized under the umbrella of the Ministry of Education, Youth and Sports in Ankara, the project will be funded through a World Bank loan. The total value of the contract is USD 4.3 million. The main aim of the project is to increase and improve the supply of well-trained labour for manufacturing industries in Turkey, and to improve employment opportunities for young people and adults who have poor education and skills.

Aer Rianta, the sister organization of Aer Lingus, the Irish national airline, is responsible for the management of the country's principal airports. Aer Rianta, in a joint venture with Aeroflot, the Soviet State airline, commenced training in the Soviet Union in 1988. The venture company called Aerofirst established two duty-free shops in Moscow Airport in May 1988. Initially, 90 Irish people were involved in setting up the project. Subsequently, Soviet staff were training in marketing, retail sales, stock control, display and all aspects of such an enterprise. The Irish intervention is now reduced to about a dozen people who are involved in various levels of management. The Soviet staff now trained and employed to run the two duty-free shops number about 90 persons. Another contract was recently signed with Aeroflot to open similar shops in Leningrad.

Arising out of inflight sales of duty-free goods on Aeroflot Airlines, their cabin crews have been trained by Aer Rianta in sales techniques and duties. To date upwards of one hundred staff members have undergone this training.

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Malle, Silvana
URSS: collocamento riformato, lavoratore licenziato?
In Politica Economia, No 3, March 1988, pp. 26-27.
Employment services. Dismissal. Student-workers. Women workers. Labour mobility. USSR.

This article is a commentary on a recent decree enacted in the Soviet Union on the 'provision of effective employment for the population, improvements to the placement system and greater social guarantees for workers'.

The groups most affected by this new policy on productivity and mobility are women and student workers. Before making workers redundant, the undertaking is under an obligation to offer them jobs corresponding to their skills and trades if there are any vacancies elsewhere. If not, workers receive a redundancy payment and a grant averaging two months' pay.

The body responsible for administering this mobility provision is the employment office which the undertaking has notified of planned redundancies and the existence of posts elsewhere. The present structure of the employment services is, however, such that they are not closely interlinked and are incapable of arranging external, inter-company or interregional mobility.

Gerbino, Giuseppe
Unione Sovietica: Sistema scolastico-formativo e politica delle riforme
In Osservatorio Isfol No 2, March-April 1989.
Educational reform. School-enterprise relationship. Vocational schools. General education. Educational levels. USSR.

This essay outlines current problems in the Soviet education and training system in the light of the new political and economic trends.

The Socialist countries, where State planning has traditionally forged direct and immediate links between supply and demand on the labour market, are now faced with a new structure of entrepreneurial enterprise and a diversity of economic agencies, creating pressure for the restructuring and reorganization of educational and training establishments.

In-plant training has long been a key factor in the Soviet education system, but it is faced with deep-rooted problems of outdated, low-standard technical and vocational schools. The remedy proposed is a two-year course combining general and technical education in different proportions, depending on three optional study patterns. However, the bodies responsible for providing guidance on occupational choice still take little account of young people's motivations, and students have no incentive to commit themselves to certain very backward sectors. Industry, for example, continues to demand low-skilled manpower, which constitutes a depressing waste of abilities and skills.

Sinibaldi, Anna Maria
La Perestroika a scuola
In Riforma della Scuola, No 4-5, April-May 1988, pp. 50-52.
Educational reform. School-enterprise relationship. Continuing education. Teachers. Creativity. USSR.

The report presented by Ligachov to the plenary session of the Central Committee of the Soviet Communist Party in February 1988 expresses a desire for reform to bring Soviet education out of the climate of stagnation and financial cuts that have prevailed for the past 15 years.

The salient points made by Ligachov report are as follows: the scientific content of the subjects studied should be raised by improving facilities and technology; greater emphasis should be laid on the subjects taught (especially economics and social subjects) to raise the standard of 'mass culture'; and there should be a programme of intensive in-service training for teachers, who are to become key figures in educational reform.

The report devotes equal attention to plans for continuing education. While retaining the aim of training people for work, the plan is to help individuals realize their potential, encourage greater creativity among the young and promote the independent acquisition of knowledge, even after education has ended.

De Lucia, Michele
La riforma della scuola nell'Unione Sovietica — introduction and comment by Jury Konstantinovic Babanski.
Tramo, Giunti e Lisciani, 1987.
Educational reform. School-enterprise relationship. Higher education. Laws. USSR.

This book sets out the text of the Soviet educational reform bill of April 1984, with brief comments by Babanski, an educationalist and vice-chairman of the Soviet Academy of Pedagogical Sciences. He points out the vital need to make work in more senior classes more job-related: 'stop playing at work and work seriously'. In other words, the needs of the labour market should be borne in mind and young people should be introduced to the social values of work; productivity should be encouraged without repressing the wealth of individual potential.

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Exchange in the framework of cooperation between the Netherlands and the countries of the Eastern bloc in the vocational training field has tended to be on an *ad hoc* rather than a systematic or structural basis and mainly at the level of higher education.

Dutch Embassies compile annual country profiles, but these make little or no mention of activities relating to vocational training.
Cultural agreements have been concluded with all Eastern European countries with the exception of Albania. Renewed every two or three years, such agreements set out the conditions for cultural, educational and scientific cooperation. The study grants to which the agreements refer are managed by the Netherlands Universities' Foundation for International Cooperation (Nuffic). Grants are also available under a programme aimed at internationalizing Dutch higher education; funds provided under this programme — known as STIR — are intended to promote internationalization and encourage initiatives by educational institutions. The government has provided two million guilders for this purpose in 1989, rising to ten million in 1990.

The North Netherlands Christian College in Leeuwarden is extending the 'leisure sciences' study project to the countries of the Eastern bloc.

Finally, NATO science fellowships are used to fund researcher exchanges among member countries. The fellowships extend over a period of 12 months.

With regard to the universities' international contacts, most universities have an office responsible for the organization and cultivation of relations with other countries. By way of example, the activities of the University of Amsterdam's International Office (Bureau Buitenland) are outlined below. Contacts are maintained with Poland, Hungary, the USSR, Bulgaria, Romania, Czechoslovakia, East Germany and Yugoslavia. It is felt that the political scope for such contacts is increasing in a number of countries thanks to the policies initiated by President Gorbachev.

Poland

A number of agreements on staff and student exchange exist with the University of Warsaw and annual programmes are drawn up to this end. Staff members change places for a few weeks and students for three or four months. Three students per institution take part in such programmes.

Hungary

Hungary is very keen to establish and strengthen contacts with the West. The Centre for Hungarian Studies, a collaborative venture between the University of Amsterdam and Groningen State University, was opened in Groningen in November 1988; its purpose is the study and dissemination of Hungarian culture; Eotvos Lorand University and the Karl Marx University in Budapest were involved in the its establishment. A similar Dutch centre is to be set up in the near future in Budapest.

Exchanges of teachers and students also take place *inter alia* in the framework of the Cultural agreement.

USSR

At this moment (March 1989) a delegation is in Leningrad for the purpose of signing an agreement on academic staff and student exchanges between Amsterdam and Leningrad in various fields, namely Slavonic languages and literature, Eastern European studies, environmental science, natural sciences, land-use planning and economics. In the specific field of languages, there are links with the Pushkin Institute and the Herzen University in Leningrad, where Dutch students of Russian may spend some time. There are no similar reciprocal arrangements. Cooperation is also being sought with Moscow University, but arrangements have yet to be completed.

Useful contacts are also maitained with the University of Sofia, Bulgaria, the University of Leipzig, East Germany, and Yugoslavia. The situation in respect of Romania and Czechoslovakia is more difficult, given the political situation and bureaucratic obstacles, and it has not proved possible to arrange visits to the Netherlands by guest lecturers from these countries.

There are of course also innumerable contacts between scientists and others who have met at conferences or who engage in academic correspondence or maintain individual academic contacts.

Selected bibliography

Programme of scientific, educational and cultural cooperation between the Government of the People's Republic of Hungary and the Government of the Kingdom of the Netherlands for the years 1988, 1989 and 1990.
20 pp., signed in The Hague, 1987.
International agreements. Culture. Hungary. Netherlands.
This agreement, covering the period from 1 January 1988 to 31 December 1990, provides for exchanges, exhibitions, performances etc. in the fields of science, education and culture.
NB The Netherlands has concluded similar agreements with a total of 43 countries. The agreement with Hungary is cited by way of example.

Ministry of Education and Science
Beurzen voor studie en onderzoek in het buitenland:
beurzen verleend door internationale organisaties (EC, NATO, Council of Europe, Unesco).
Zoetermeer, 1987, 95 pp.
Ministry of education. Scholarships. European communities. Unesco. Council of Europe. Higher education. Netherlands.
This booklet provides a comprehensive list, by country and organization, of grants available for study abroad.

Ministry of Education and Science
Internationalisering van Onderwijs en Onderzoek.
The Hague, 1988, 114 pp. ISBN 90 12 05650 0
International cooperation. Research. Higher education. Educational policy. Research policy. Europe. Developing countries. Ministry of education. Netherlands.
The key aim of the policy set out in this document is to make the best possible use of the opportunities offered by international contacts and cooperation for strengthening education and research in the Netherlands and, more broadly, in Europe. The document is concerned with higher education in its entirety and with basic, strategic and applied research. In addition to the general reinforcement of the international dimension of education and research, a major element of policy is the development of assessment and decision-making processes in respect of Dutch participation in international research facilities and cooperative fora.

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Since April 1974 there have been indications by countries in the Eastern bloc that they are interested in developing cooperation and friendship with Portugal. Conditions have been created to extend and intensify cooperation, principally in the fields of education/culture and science/technology.

Agreements between Portugal and Eastern European Countries

Scope of the Agreements

In 1975 and 1976 agreements were signed between Portugal and the Governments of the Eastern European Countries (Russia, Bulgaria, Yugoslavia, Romania, Hungary, Poland, Czechoslovakia) with the following objectives:

- the development of cooperation between scientific and research institutions (exchange visits by scientists and research workers for the purpose of study and the exchange of scientific publications and other literature);

- the development of relations in the field of education: (a) cooperation between universities and other higher education establishments;
(b) organization of courses and conferences in higher education establishments to study the languages, literature and culture of the different countries; (c) exchange visits by teaching staff at all levels to enable them to take part in conferences and exchange information; (d) the reciprocal provision of literature and information on the economy, geography, history, culture and the administration of each country, with a view to using this information in school books and other publications relating to the countries in question; (e) the exchange of specialist publications and other information and documentation in the field of education.

Scholarships/Equivalents/Exchanges

In order to put these objectives into practice, it was intended to institute general and specialized scholarships to enable citizens from other countries to study, conduct surveys, research and other work in their countries or to improve their cultural and technical/scientific training. Each country would be prepared to study certificates, diplomas and degrees in other countries which might be equivalent to those in their own States. The necessary literature and suitable proposals would therefore be made available for exchange by the countries concerned. There would be an exchange of specialists during limited periods in order to provide assistance in the fields of science, education and other matters. Agreements between the appropriate ministries and institutions of the two countries would be required before an exchange took place.

Friendship associations

Friendship associations between Portugal and Russia, Bulgaria, East Germany and Czechoslovakia, also formed in April 1974, have acted as intermediaries in tourist programmes and vocational training courses, particularly in relation to art and culture.

Youth summer camps/Courses

Since the work of young people in holiday camps also assists in the learning of language and culture, the Youth Institute of Portugal has been involved in an exchange of activities of this nature with various institutions in the Eastern European countries (Poland, Bulgaria, East-Germany, Czechoslovakia, Russia and Hungary).

In Poland, institutions such as Polonicum, Letnia Szkoca, the Polonia Research Institute and Nicolas Copernicus University hold summer courses with lectures given by university teaching staff, in which young people from Portugal can participate and receive final certificates or diplomas.

In 1988, the Czechoslovak Ministry of Education awarded two scholarships for Portuguese students to attend summer courses in Czech at the University De Carlos.

Icalp, the Institute of Portuguese Culture and Language, also has agreements with Eastern European countries, on the exchange of teachers of their respective languages at the various universities.

Study and parliamentary delegations visits

As a result of these activities, parliamentary delegations from the Portuguese Republic Assembly have visited the countries in question and delegations from these countries have in turn visited Portugal. In addition to these official exchange visits, Portugal has taken part in the following functions:

the Warsaw Conference of 26 November 1988,

the 64th Conference of the Inter-Parliamentary Union in Sofia from 19 - 30 September 1987,

the Council of Europe in Belgrade on 21/22 October 1976.

Note

For various reasons, exchanges between Portugal and Eastern European countries had remained dormant or almost forgotten until now. It is expected that in future this relationship will enter into a period of increased mutual cooperation, mainly due to the increasing *glasnost* shown by these countries in a wide variety of fields.

In this situation, it should be pointed out that as a result of the initiative and planning by the Founding Committee for the CMEA (Council for Mutual Economic Assistance) Institute for Cooperation between Portugal and Socialist countries there are now campaigns to encourage, provide information for and aid Portuguese enterprises to explore the possibility of trade with CMEA member States.

This committee is already receiving the cooperation of Ambassadors from some Socialist countries; there is a special relationship between Portugal and Czechoslovakia which aims at achieving a framework of interests common to the two countries.

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Although a number of commercial and political agreements have been made recently between the United Kingdom and countries of the Eastern bloc, there has been relatively little change in the area of vocational education and training.

The Secretary of State for Education, Mr Kenneth Baker, recently visited the USSR on a fact-finding mission to look at the levels of educational provision there by comparison with the UK. This visit was informative for both countries involved and has resulted in a school being built in Armenia with British guidance.

The British Council remains the body most actively involved in collaboration and exchanges overseas, including, of course, the Eastern bloc, particularly Poland. The British Council are involved in the support of researchers concerned with gathering comparative data in all disciplines, as well as with the provision of expert specialist advice. The amount of activity taking place within the Eastern bloc is still limited but with the influence of perestroika this could well increase.

Individual universities and institutions have also developed links with the Eastern bloc. For instance, there are links between the British Academy and the Russian Academy of Sciences and various educational institutions, including the London School of Economics, Aston University and the Polytechnic of Leeds have held conferences to explore the possibilities of developing collaborative research across the East-West divide.

The UK also has links with international organizations who are concerned with developing further collaboration with the Eastern bloc; for instance the Vienna Centre, which was set up in 1963 to coordinate East-West research endeavours, and the European Coordination Centre for Research and Documentation in the Social Sciences, set up in 1979 to launch a series of training seminars aimed at bringing researchers up to date with new developments and ensuring the dissemination of their own research in organizing projects between East and West.

Payne, D.: **Education for adults in China**
Adult Education 59(4) March 1987 pp. 356-360 ISSN 0001-849 X
Adult education. Training. Vocational training. China

Now that China has opened up its frontiers to visitors, it is interesting to see what kind of provision is being made for the education of the adult population. This article is based on two study visits and gives a brief outline of some of the work being done. Remarkable strides have been made and new hotels have been built, training provided for tour guides and a general awareness of China's heritage has been cultivated.

Korn, K.; Feierabend, G.; Hersing, G.: **Education, employment and development in the German Democratic Republic**
Paris, Unesco, 1984, 170 pp. ISBN 92-803-1112-3
Training employment relationship. Economic conditions. Education and training. Educational policy. Educational planning. German Democratic Republic
Considers the relationship between education and training systems and economic development in the context of the German Democratic Republic.

Basnett, A.: **Foreign report: Bulgaria's new revolution**
Education 170(1) July 1987 pp. 16-17
Vocational training. Educational systems. Youth. Skills. Schools. Bulgaria
Illiteracy was widespread in Bulgaria 45 years ago as many children did not attend school. However, within a few years of the 1944 revolution illiteracy was eradicated. Now a new revolution is under way as the school system is being reorganized to provide vocational training so that pupils not only leave school with an educational certificate but also with a certificate of professional qualifications.

Weeks, S.: **Vocational education and training in the USSR**
Newscheck 4(7) May 1987 pp. 8-10 ISSN 0307-8477
Education and training. Education. Training. Vocational training. USSR
In 1986 the author and 40 other careers officers went on an eight-day visit to Moscow and Leningrad. They visited several sites where vocational education and training was taking place and these are described.

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